

QK
351
M35
N/c

MINERALOGICAL ABSTRACTS

Volume 26 - Index
1975

Principal Editor
R. A. HOWIE

Indexers
A. M. and L. J. CLARK

U. I. C. C.
AUG 5 1976
LIBRARY

PUBLISHED JOINTLY BY
THE MINERALOGICAL SOCIETY OF GREAT BRITAIN AND THE MINERALOGICAL SOCIETY OF AMERICA
LONDON 1976

Annual Subscription for four numbers and index, Post Free, \$50 (U.S.): £20.00

MINERALOGICAL ABSTRACTS

COMMITTEE OF MANAGEMENT

Mineralogical Society of Great Britain

E. A. VINCENT, *President*

J. E. T. HORNE, *Secretary*

A. H. WEIR, *Treasurer*

A. R. WOOLLEY, *Publications Manager*

Mineralogical Society of America

A. MUAN, *President*

JOAN R. CLARK, *Secretary*

G. W. FISHER, *Treasurer*

MINERALOGICAL ABSTRACTS

VOLUME 26

1975

PRINCIPAL EDITOR

R. A. HOWIE

EDITORS

C. M. B. HENDERSON P. M. COOK

INDEXERS

A. M. and L. J. CLARK

SUB-EDITORS

DR. T. W. BLOXAM
MR. R. J. L. COLVINE
MISS E. E. FEJER
DR. R. K. HERD

DR. D. R. C. KEMPE
DR. W. J. MCHARDY
DR. I. PARSONS
DR. J. N. WEBER

ORGANIZERS OF ABSTRACTS

Great Britain:

DR. C. M. B. HENDERSON,
Dept. of Geology,
The University
Manchester, M13 9PL.

America:

MISS M. HOOKER
U.S. Geological Survey,
Reston,
Virginia.

- Argentina:* DR. M. A. LEVERATTO, Dept. de Geologia, Univ. de Buenos Aires.
Australia: DR. J. A. HALLBERG, C.S.I.R.O., Min Res. Laboratories, P.O. Wembley, Western Australia 6014.
Austria: PROF. HANS I. WIESENEDER, Mineralogisch-Petrographisches Institut, Universität Wien.
Belgium: DR. R. VAN TASSEL, Institut Royal des Sciences Naturelles, Brussels.
Bulgaria: PROF. IV. KOSTOV, Chair of Mineralogy, University of Sofia.
Canada: PROF. L. G. BERRY, Queen's University, Kingston, Ontario.
Czechoslovakia: PROF. DR. M. KODĚRA, Katedra Min. Kryšt., University Komenského, Bratislava.
Denmark: MR. OLE JOHNSEN, Mineralogisk Museum, Ostervoldgade 5-7.
Egypt: DR. E. M. EL SHAZLY, Geological Society of Egypt, 1 Elhamy St., Kasr El Doubara, Cairo.
Finland: DR. J. SIIVOLA, Geological Survey of Finland, SF-02150 Esbo 15.
Germany: DR. ISA KUBACH, Joachim Becherstrasse, 2 Frankfurt-am-Main.
India: DR. V. K. NAYAK, Centre of Advanced Study in Geology, Univ. Saugar.
Israel: DR. DAN H. YAALON, The Hebrew University of Jerusalem.
Italy: PROF. EDOARDO SANERO, Istituto di Mineralogia e Petrografia, Università di Genova.
Japan: DR. ICHIRO SUNAGAWA, Inst. Min. Petr. & Econ. Geology, Tohoku Univ., Sendai.
Netherlands: DR. B. V. D. PIJPEKAMP, Billiton Research BV, Postbus 38, Arnhem.
New Zealand: DR. G. A. CHALLIS, N.Z. Geol. Survey, P.O. Box 30368, Lower Hutt.
Norway: PROF. I TH. ROSENQVIST, Institut for Geologi, Universitetet, Oslo.
Pakistan: DR. F. A. SHAMS, University of the Punjab, Lahore, West Pakistan.
Portugal: PROF. L. A. A. BARROS, Lab. de Mineralogia y Petrologia, Av. Rovisco Pais, Lisboa I.
South Africa: PROF. H. V. EALES, Dept. of Geology, Rhodes University, Grahamstown.
Spain: PROF. M. FONT-ALTABA, Dept. Cristalografía y Mineralogia, Universidad, Barcelona.
Sweden: DR. B. LINDQVIST, Mineralogisk Geol. Inst., Uppsala.
Switzerland: PROF. DR. TH. HÜGI, Mineralog-Petrograph. Institut, Sahlistrasse 6, Bern.

PUBLISHED JOINTLY BY

THE MINERALOGICAL SOCIETY OF GREAT BRITAIN AND THE MINERALOGICAL SOCIETY OF AMERICA
LONDON-1976

CONTENTS

	Abstract Numbers
Age determination	5-1, 722, 1697, 2798
Apparatus and techniques	5-21, 748, 1728, 2844
Book notices	5-56, 783, 1799, 2902
Clay minerals	5-75, 792, 1815, 2916
Crystal structure	5-141, 850, 1877, 2986
Economic minerals and ore deposits	5-191, 900, 1953, 3064
Experimental mineralogy	5-245, 1004, 2075, 3142
Gemstones	5-305, 1075, 2182, 3309
Geochemistry	5-312, 1120, 2197, 3322
Lunar studies	5-418, 1233, 2342, 3422
Meteorites and tektites	5-424, 1258, 2370, 3436
Mineral data	5-437, 1285, 2395, 3454
New minerals	5-547, 1388, 2519, 3589
Petrology	5-560, 1400, 2534, 3607
Physical properties of rocks and minerals	5-678, 1647, 2724, 3853
Topographical mineralogy	5-700, 1672, 2755, 3883
Various topics	5-716, 1686, 2772, 3891

Place-names are, in general, in the form used in the Columbia-Lippincott Gazetteer of the World (1952 edition); alternative forms are given on occasion.

Grateful thanks are due to those readers who have notified us of errors in volume 26 of *Mineralogical Abstracts*.

ORGANIZATION OF ABSTRACTS

Arising from a decision taken at the meeting of the INTERNATIONAL MINERALOGICAL ASSOCIATION in Copenhagen in 1961 the Mineralogical Societies of America and Great Britain agreed to issue a joint statement to National Societies adhering to the Association inviting each Society to organize contributions of abstracts of papers published in journals of its country on subjects relevant to *Mineralogical Abstracts*. This invitation was issued and has brought a gratifying response. Members of Societies which have agreed to co-operate in this way are entitled to receive *Mineralogical Abstracts* for their personal use at a reduced rate of subscription on application, which must be made through their National Society. The countries now co-operating include: AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CZECHOSLOVAKIA, DENMARK, EGYPT, FINLAND, GERMANY, INDIA, ISRAEL, ITALY, JAPAN, NETHERLANDS, NEW ZEALAND, NORWAY, PAKISTAN, PORTUGAL, SPAIN, SWEDEN, SWITZERLAND. Individual mineralogists and petrologists in countries not represented in the Association, or not yet co-operating through their National Society, provide abstracts from the literature of ARGENTINA, BRAZIL, KENYA, MEXICO, and SOUTH AFRICA.

ABSTRACTORS

Contributors to this volume of *Mineralogical Abstracts* are:

Atkins, J. E. (J.A.), U.S.A.; Atkins, F. B. (F.B.A.), Gt. Britain; Ball, D. F. (D.F.B.), Gt. Britain; Barnum, B. E. (B.E.B.), U.S.A.; Aires Barros, L. (L.A.B.), Portugal; Beran, A. (A.B.), Austria; Bertlik, F. (F.Be), Austria; Bishop, A. C. (A.C.B.), Gt. Britain; Blank, H. R. (H.R.B.), U.S.A.; Brinelly, T. (T.B.), U.S.A.; Bridge, P. J. (P.J.B.), Australia; Bush, A. L. (A.L.B.), U.S.A.; Chisholm, J. E. (J.E.C.), Gt. Britain; Clark, A.M. (A.M.C.), Gt. Britain; Colvine, R. J. L. (R.J.L.C.), Gt. Britain; Cook, P. M. (P.M.C.), Gt. Britain; Cooper, M. (M.C.), U.S.A.; Davis, C. E. S. (C.E.S.D.), Australia; Dimmock, G. M. (G.M.D.), Australia; Drysdale, D. J. (D.J.D.), Australia.

Eales, H. V. (H.V.E.), South Africa; Ehlmann, A. J. (A.J.Eh.), U.S.A.; Elsdon, R. (R.E.), Ireland; Eltantawy, I. M. (I.M.Elt.), France; Embrey, P. G. (P.G.E.), Gt. Britain; Emiliani, F. (F.E.), Italy; Fejer, E. E. (E.E.F.), Gt. Britain; Ferguson, R. B. (R.B.F.), Canada; Ferraris, G. (G.F.), Italy; Fischer, R. (R.F.), Austria; Frisch, T. (T.F.), Canada; Gait, R. I. (R.I.G.), Canada; Gallitelli, P. (P.G.), Italy; Göd, R. R. (R.R.G.), Austria; Hall, A. (A.H.), Gt. Britain; Hall, R. B. (R.B.H.), U.S.A.; Hallberg, J. A. (J.A.H.), Australia; Hampar, M. S. (M.S.H.), Gt. Britain; Huff, P. L. (P.L.H.), U.S.A.; Henderson, C. M. B. (C.M.B.H.), Gt. Britain; Henley, K. J. (K.J.H.), Australia; Hey, M. H. (M.H.H.), Gt. Britain; Hooker, M. (M.H.), U.S.A.; Howie, R. A. (R.A.H.), Gt. Britain; Hügi, Th. (Th.H.), Switzerland; Hutchison, R. (R.H.), Gt. Britain.

Japan, Min. Soc. (M.S.J.), Japan; Johnson, L. R. (L.R.J.), Gt. Britain; Keeling, J. L. (J.L.K.), Australia; Kempe, D. R. C. (D.R.C.K.), Gt. Britain; Kleeman, A. W. (A.W.K.), Australia; Knorring, O. von (O.v.K.), Gt. Britain; Koller, F. (F.Ko.), Austria; Kopp, O. C. (O.C.K.), U.S.A.; Kostov, I. (I.K.), Bulgaria; Krishnamurthy, P. (P.K.), India; Kubach, I. (I.Kb.), Germany; Kühn, R. (R.K.), Germany; Le Bas, M. J. (M.J.LeB.), Gt. Britain; Lewis, J. D. (J.D.L.), Australia; Lindqvist, B. (B.L.), Sweden; Lindsay, J. R. (J.R.L.), U.S.A.; Love, L. G. (L.G.L.), Gt. Britain; Medke, R. G. (R.G.L.), U.S.A.; McHardy, W. J. (W.McH.), Gt. Britain; MacKenzie, W. S. (W.S.M.), Gt. Britain; Marsh, J. S. (J.S.M.), South Africa; Mason, B. (B.M.), U.S.A.; Mason, R. (R.M.), Gt. Britain; Mazzi, F. (F.M.), Italy; Mélon, J. (J.M.), Belgium; Mitchell, R. S. (R.S.M.), U.S.A.; Morgan, D. J. (D.J.M.), Gt. Britain; Murthy, P. Krishna (P.K.M.), India; Myers, J. S. (J.S.My.), Denmark.

Nayak, V. K. (V.K.N.), India; Nicol, A. W. (A.W.N.), Gt. Britain; O'Donoghue, M. (M.O'D.), Gt. Britain; Olsen, E. (E.O.), U.S.A.; Pabst, A. (A.P.), U.S.A.; Parsons, I. (I.P.), Gt. Britain; Pipping, F. (F.P.), Gt. Britain; Rea, W. J. (W.J.R.), Gt. Britain; Rose-Hansen, J. (J.R.-H.), Denmark; Rosenblum, S. (S.R.), U.S.A.; Rosenqvist, I. Th. (I.Th.R.), Norway; Rost, R. (R.R.), Czechoslovakia; Rutland, E. H. C. (E.H.C.R.), Gt. Britain; Siegrist, M. (M.S.), U.S.A.; Stephenson, N. C. N. (N.C.N.S.), Australia; Taylor, D. (D.T.), Gt. Britain; Thompson, A. B. (A.B.T.), Gt. Britain; Töpper, W. (W.T.), Germany; Van Tassel, R. (R.V.T.), Belgium; Walsh, J. N. (N.W.), Gt. Britain; Watt, W. S. (W.S.W.), Denmark; Weibel, M. (M.W.), Switzerland; Wieseneder, H. I. (H.I.W.), Austria; Yaalon, D. H. (D.H.Y.), Israel; Žák, L. (L.Ž.), Czechoslovakia.

ERRATA

Mineralogical Abstracts, vol. 23

Abstract Nos.

72-1850 *for phenacite and phenakite read fenaksite*

Mineralogical Abstracts, vol. 25

Index, p. 399 *for notronite read nontronite*

Mineralogical Abstracts, vol. 26

75-107 *for McBride read McBride*
75-124 *for Gunma read Gumma*
75-320 *for Karatair read Karatau*
75-393 *for Gaurak read Gaurdak*
75-1395 *for lafittite read laffittite*
75-2330 *for gargarinite read gagarinite*
75-2393 *for Rahasthan read Rajasthan*
75-3178 *for Kazakhstan read Kazakhstan*
75-3389 *in title, insert oxygen between and and isotope*
75-3601 *for mprororoite read mpororoite*

ABBREVIATIONS AND SYMBOLS

J. . . Mineralogical Magazine : M.A. . . Mineralogical Abstracts : A.M. . . American Mineralogist

CHEMICAL & PHYSICAL CHEMICAL

atomic absorption spectroscopy	..	AAS
cation-exchange capacity	..	c.e.c.
chemical analysis	..	chem. anal.
concentrated	..	conc.
differential thermal analysis	..	DTA
dilute	..	dil.
disintegrations per minute	..	d.p.m.
equivalent U ₃ O ₈	..	eU ₃ O ₈
ethylenediaminetetra-acetic acid	..	EDTA
heat of formation (absolute temperature subscript)	..	ΔH_t
hydrogen ion conc. acidity	..	pH
insoluble residue	..	insol. res.
isotopes, e.g.	..	⁴⁰ Ar, ⁴⁰ K
loss on ignition	..	ign. loss
milliequivalent	..	me.
microgramme	..	μ g
million-years	..	m.y.
neutron activation analysis	..	NAA
not determined	..	n.d.
not found	..	nt. fd.
not present	..	nil
parts per million	..	p.p.m.
rare earths	..	TR or RE
standard mean ocean water	..	SMOW
strength of solution, normal	..	N
— — — molar	..	M
substances in ionic state		
anions, e.g.	..	Cl ⁻ , SO ₄ ²⁻
cations, e.g.	..	K ⁺ , Fe ³⁺
thermogravimetric analysis	..	TGA
trace	..	tr.
X-ray fluorescence analysis	..	XRF

CRYSTALLOGRAPHIC & STRUCTURAL

Angstrom unit (10 ⁻⁸ cm)	..	Å
crystal axes	..	<i>a, b, c</i>
— face indices	..	(hkl)
— form indices	..	{hkl}
— zone indices	..	[hkl]
indices of X-ray diffractions	..	hkl
intensity	..	<i>I</i>
— relative	..	<i>I/I</i> ₀
interplanar spacing	..	<i>d</i>
mica structural polymorphs	..	1M ₁ , 2M ₁
Siegbahn units	..	kX
space group. These words are written in full		
unit cell, formula units	..	<i>Z</i>
— — repeat distances	..	<i>a, b, c</i>
— — reciprocal lattice lengths of edges	..	<i>a*</i> , <i>b*</i> , <i>c*</i>
— — interaxial angles direct lattice	..	α, β, γ
— — — reciprocal lattice	..	α^* , β^* , γ^*

OPTICAL

dispersion, e.g.	..	$r > v$
electron microscopy	..	EM
extinction angle, e.g.	..	$\gamma : c$
infrared	..	IR
optic axial angle	..	2V
— — plane	..	O.A.P.
refractive index, in text	..	refr. ind.
— — of isotropic mineral	..	<i>n</i>
refractive indices		
of uniaxial mineral	..	ω, ϵ
of biaxial mineral	..	α, β, γ
scanning electron microscopy	..	SEM
sign of biaxiality		
negative	..	2V _{α} or —
positive	..	2V _{γ} or +
ultraviolet	..	UV

PHYSICAL

calculated	..	calc.
calorie	..	cal.
calorie, large	..	kcal.
cycles per second	..	c/s
degree centigrade	..	°C
density	..	<i>D</i> (quote units)
—, relative, e.g.	..	D ₄ ²⁰
electron paramagnetic resonance	..	e.p.r.
gramme	..	g
hardness	..	H.
melting-point	..	m.p.
micron (10 ⁻⁴ cm)	..	μ
millimicron (10 ⁻⁷ cm)	..	m μ
nanometre (10 ⁻⁷ cm)	..	nm
natural remanent magnetization	..	n.r.m.
pounds per square inch	..	lb/in. ²
pressure	..	<i>P</i>
soluble	..	sol.
specific gravity, terms of reference not known	..	sp. gr.
temperature	..	<i>T</i>
Vickers hardness number	..	VHN
wavelength	..	λ

SYMBOLS

approximately equal to	..	~
equal to	..	=
equal to or greater than	..	≥
equal to or less than	..	≤
greater than	..	>
less than	..	<
not equal to	..	≠
parallel to	..	
per cent.	..	%
per mille	..	‰
perpendicular to	..	⊥
proportional to	..	∝

ABBREVIATIONS USED IN REFERENCE TO PUBLICATIONS

Abhdl.	Abhandlungen	Gesell.	Gesellschaft	Prosp.	Prospecting
Abstr.	Abstract, -s	Govt.	Government	Publ.	Publication(s), published
Abt.	Abteilung				
Acad., Accad., Akad.	Academy, & equiv.	Hdbh.	Handbuch	Razv.	Razvedka = survey
Adv.	Advancement			Rec.	Records
Agric.	Agricultur-al, -e	Illustr.	Illustrat-ed, -ions	Ref.	References, referata
Anal.	Analy-st, -tical, &c.	Imp.	Imperial	Rend.	Rendiconti
Ann., An.	Annals, Anales, & equiv.	Industr.	Industr-ial, -y	Repb.	Republic
Anorg.	Anorganisch	Inform.	Information	Rept.	Report(s)
Appl.	Applied	Inst.	Institute, institution, & equiv.	Res.	Research
Arch.	Archives	Instr.	Instruments	Reserv.	Reserves
Asoc., Assoc.	Association, & equiv.	Int.	Interior	Resrcs.	Resources
Astron.	Astronomical	Intern.	International	Rdsch.	Rundschau
		Invest.	Investigations	Rev.	Review
Bd.	Band	Issl.	Issledovaniye = investigation	Roy.	Royal, & equiv.
Beitr.	Beiträge	Ist.	Istituto		
Ber.	Berichte	Izd.	Izдание = publication	Sborn.	Sbornik = magazine
Berg.	Bergwesen	Izvest.	Izvestiya	Sch.	School, Schule
Bol., Boll., Bull.	Bulletin, & equiv.			Sci.	Science
Bur.	Bureau	Jahrb.	Jahrbuch	Sect.	Section
		Jahresb.	Jahresbericht	Sedim.	Sedimentary
Ceram.	Ceramic, & equiv.	Jorn., Journ.	Journal, & equiv.	Ser., sér.	Series, & equiv.
Chem., Chim.	Chemi-cal, -stry, & equiv.			Serv.	Service
Cien.	Ciencia, -s	Khim.	Khim-ie, &c.	Sitzb.	Sitzungsbericht
Circ.	Circular	Kl.	Klasse	Skr.	Skript, -en -er
Cl.	Classe	Krist.	Kristallographie, &c.	Soc.	Society, & equiv.
Com.	Comisión			Sondbd.	Sonderband
Comm.	Commission	Lab.	Laboratory	Spec., spez.	Special, & equiv.
Conf.	Conference, & equiv.	Lit.	Literary	Stand.	Standard(s)
Congr.	Congress, & equiv.			Stn.	Station
Contr.	Contributions	Mag.	Magazine	Suppl.	Supplement
C.R.	Comptes Rendus	Mat., Math.	Mathematical, & equiv.	Surv.	Survey, -or
Crist., Cryst.	Crystallograph-ical, -y & equiv.	Medd.	Meddelelser	Symp.	Symposium
		Mem., Mém.	Memoir, -s, & equiv.		
Dept.	Department, & equiv.	Metall.	Metallurg-ical, -y	Tab(s).	Table(s), tabellen
Diss.	Dissertation	Min.	Mineralog-ical, -ist, -y	Techn.	Technologi-cal, -y
Divn.	Division	Misc.	Miscellaneous	Tids(s)kr.	Tid(s)krift, -en
Dokl.	Doklady = C.R.	Mitt.	Mitteilungen	Tijdschr.	Tijdschrift
		Mh.	Monatsheft	Trab.	Trabajos
Econ.	Economic	Mus., Muz.	Museum, & equiv.	Trans.	Transactions
Educ.	Education			Transl.	Translat-ed, -ion
Eng.	Engineering	Nac., Nat., Naz.	National, & equiv.		
Exped.	Expedition	Natur.	Natur-al, -alist, & equiv.	U.A.R.	United Arab Republic
Exper.	Experimental	Natur-w, -v.	Naturwissenschaft, & equiv.	Uch.	Uchenyye = learned
Expl.	Exploration			Ucheb.	Uchebnyi = teaching
		Obraz.	Obrazovanie = education	Unders.	Undersögelse, undersökning
Fac.	Faculty	Obshch.	Obshchestva = society	Univ.	University, & equiv.
Fig(s).	Figure(s)				
Fis.	Fiscale, fisico	Petr.	Petrolog-ical, -y, & equiv.	Verhdl.	Verhandlungen
Fören.	Föreningen	Petrol.	Petroleum	Vidsensk.	Videnskaps
Förh.	Förhandlinger	Phil.	Philosophical, &c.	Volc., Vulk.	Volcanolog-ical, -y &c.
Fortsch.	Fortschritt, -e	Photos.	Photographs	Vses.	Vsesoyuznyi = All-Union
		Photomicros.	Photomicrographs	Vyshh.	Vyshikh = higher
Gen.	General	Phys.	Physic-al, -s, & equiv.		
Geo-chem., chim.	Geochemi-cal -stry, &c.	Pl(s).	Plate(s)	Wiss.	Wissenschaft
Geogr.	Geograph-y, ical, &c.	Polytech.	Polytechnic, & equiv.		
Geol., géol.	Geology, -ical, -ist, & equiv.	Pract., Prakt.	Practical, & equiv.	Zap.	Zapiski = memoirs
Geophys., geofis.	Geophysic-al, -s, &c.	Proc.	Proceedings	Zav.	Zavodskaya = factory
		Prof.	Professional	Zaved.	Zavedenii = institution
				Zeits.	Zeitschrift
				Zhurn.	Zhurnal = journal
				Ztg.	Zeitung

INDEX OF AUTHORS

- onson, H. I., 75-1882
 pey, S., 75-43, 3420
 ott, B. M., 75-1504
 el-Khalek, M. L., 75-674
 el-Monem, A., 75-729, 2831
 e, M., 75-3734
 erg, G., 75-2803
 ordeppey, V. K., 75-3903
 ou Deeb, J., 75-1727
 raham, K., 75-2407, 3462
 s-Wurmbach, I., 75-2142
 thauer, C. W., 75-2261
 kermmand, D., 75-3251
 amides, N. G., 75-2645
 ams, H. G., 75-3292
 ams, J. A. S., 75-3418
 ams, J. B., 75-2728
 ams, S. S., 75-2063
 dy, S. K., 75-1731
 e-Hall, J. M., 75-730, 2742
 eleye, D. R., 75-3086
 olphe, J.-P., 75-3251
 lyalkar, P. G., 75-580, 1812
 anas'ev, V. P., 75-437
 anas'yev, G. D., 75-1301
 onina, G. G., 75-3015
 emian, H., 75-767
 rawal, B. S., 75-3063
 rawal, Y. K., 75-2879
 rlfeld, F., 75-2009
 rlrchs, J. W., 75-916
 rmad, N., 75-2393
 rmed, F., 75-1498
 rmed, S., 75-2406
 rmed, Z., 75-2406
 rrens, L. H., 75-2387
 rrens, T. J., 75-1028, 2139
 rikawa, N., 75-859, 1891
 rres-Barros, L., 75-2553, 2644
 rzenshtat, Z., 75-2276
 rkao, M., 75-1940
 kayeva, V. P., 75-120
 kimoto, S., 75-276, 2131, 3010
 kin, H., 75-1984
 kizuku, M., 75-3265
 labina, A. A., 75-387
 Al-Arabi, N. A., 75-844
 Alben, R., 75-2997
 Alberti, A., 75-876, 2462
 Albrecht, P., 75-1186
 Alderton, D. H. M., 75-3815
 Aleksandrov, A. L., 75-3697
 Aleksandrova, N. P., 75-3567
 Alekseeva, M. A., 75-2527
 Aléonard, S., 75-1949
 Alexander, E. C., Jr., 75-421
 Alexandersson, T., 75-2512, 3379
 Alexandrov, E. A., 75-2011
 Al-Hashimi, W. S., 75-3783
 Ali, S. A., 75-3404
 Alietti, A., 75-1848
 Allan, R. J., 75-414, 416, 2266
 Allard, G. O., 75-737
 Allégre, C. J., 75-3439, 3765
 Allen, C., 75-609
 Allen, E. P., 75-2768
 Allen, G. C., 75-1231
 Allen, G. P., 75-614
 Allen, J. R. L., 75-1799
 Allen, R. O., 75-2083, 3326
 Allison, L. A., 75-2769
 Allsopp, H. L., 75-6
 Allwardt, A. O., 75-3505
 Al-Maleh, M. A. Kh., 75-1001
 Al-Mansur, M., 75-1384
 Almeida, F., 75-583
 Aloisi, J.-C., 75-614
 Alpaslan, T., 75-3881
 Alpern, B., 75-3448
 Al-Shahristani, H., 75-1216
 Alsinaawai, S. A., 75-3893
 Althaus, E., 75-291
 Alvarez, W., 75-3720
 Ambrustmacher, T. J., 75-494
 Amiel, A. J., 75-321, 1854, 3404
 Amstutz, G. C., 75-623, 987
 Amthauer, G., 75-1290
 Anagnostopoulos, T., 75-687
 Anchor, M., 75-2195
 Andeen, C., 75-1747
 Anders, E., 75-312, 3438
 Andersen, C. A., 75-1759
 Anderson, A. T., 75-1484, 3746
 Anderson, A. T., Jr., 75-347, 1485
 Anderson, B. J., 75-2270
 Anderson, B. W., 75-311, 1116, 3319
 Anderson, C. A., 75-500, 986
 Anderson, D. L., 75-1690
 Anderson, G., 75-2907 (4, 5)
 Anderson, G. M., 75-922, 3254
 Anderson, J. G., 75-417
 Anderson, T. F., 75-1577
 Andewag, A. H., 75-782
 Ando, T., 75-1782
 Andreae, M. O., 75-1188
 Andrew, E. M., 75-2552
 Andriambololona, R., 75-3360
 Angel, B. R., 75-804
 Angeletos, S., 75-3255
 Anguita, F., 75-3727
 Anisimov, L. A., 75-3410
 Annamalai, M., 75-139
 Annells, R. N., 75-3676
 Annels, A. E., 75-908
 Annersten, H., 75-880, 1966
 Ansell, H. G., 75-3889
 Anselmi, B., 75-1545
 Anoshin, G. N., 75-343
 Anthonioz, P.-M., 75-3543
 Anthony, A.-M., 75-3142 (III.2)
 Anthony, G. D., 75-1836
 Antoine, J. W., 75-2903 [51]
 Anufriyev, G. S., 75-3414
 Aoki, K., 75-514, 2430
 Aoki, M., 75-670
 Aoki, S., 75-1575, 1867, 2951
 Aoyagi, K., 75-123, 651
 Aparicio, A., 75-3831
 Appanagoudar, S. M., 75-1450, 1452
 Appel, P. U., 75-2040
 Appelt, H., 75-2945
 Appleyard, E. C., 75-2589
 Applin, K. E. S., 75-62
 Apt, K. E., 75-1131
 Arai, F., 75-2632
 Arakawa, M., 75-92
 Arakelian, A., 75-3780
 Araki, T., 75-181, 884, 893-895, 1377, 1945, 3009
 Aramaki, S., 75-328
 Araña Saavedra, V., 75-2902
 Archer, A. A., 75-197
 Arculus, R. J., 75-1519
 Ardu, D. A., 75-1513
 Ārkai, P., 75-2698
 Arkangel'skaya, V. V., 75-3239
 Armands, G., 75-3377
 Armbrustmacher, T. J., 75-3709
 Armstrong, R. L., 75-742, 1724, 1726, 2826
 Armstrong-Smith, G., 75-62
 Arnautov, N. V., 75-387
 Arndt, J., 75-2173
 Arnold, P. W., 75-811
 Arnold, M., 75-3102
 Arnold, R. G., 75-3557
 Arnould, M., 75-1142
 Arnoux, A., 75-832
 Arogyaswamy, R. N. P., 75-629
 Aronson, J., 75-1480
 Arora, A. D., 75-12
 Arpino, P., 75-1186
 Arrhenius, G., 75-2382
 Arthur, D. W. G., 75-2367
 Arvidson, R. E., 75-3904, 3908
 Asayama, T., 75-327
 Ascarrunz-K, R., 75-3095
 Ashaye, T. I., 75-2965
 Ashcroft, W. A., 75-573
 Ashley, G. M., 75-2859
 Ashley, P. M., 75-3554
 Ashraf, M., 75-3126, 3127
 Ashworth, J. R., 75-2388
 Aslam, J., 75-898
 Aslaner, G., 75-973
 Assanov, M. A., 75-908
 Assorgia, A., 75-1493, 1496
 Asthana, M., 75-2718
 Aston, S. R., 75-1174
 Aswathanarayana, U., 75-1790
 Atanasov, V. A., 75-3561
 Athavale, R. N., 75-3873
 Atkinson, R. J., 75-1830
 Atwood, M. T., 75-2071
 Aubertin, A., 75-2903 [37]
 Auh, K., 75-3236
 Aumento, F., 75-698, 747
 Aung, UH., 75-3107
 Auriere, M., 75-2782
 Aurora, R. P., 75-13
 Austen, C. E., 75-49
 Austin, G. S., 75-3520
 Auzende, J.-M., 75-2903 [53]
 Axon, G. V., 75-306
 Ayan, M., 75-1630
 Aydin'yan, N. Kh., 75-3035
 Aye, UT., 75-3107
 Aylmore, L. A. G., 75-83
 Ayres, D., 75-1364
 Ayrton, S. N., 75-1620
 Azuma, Y., 75-1732
 Babcock, E. A., 75-1434
 Babel, U., 75-2907 (7)
 Babu, S. K., 75-2432, 2621
 Bacon, M., 75-617
 Badalov, S. T., 75-947
 Baddenhausen, H., 75-2386
 Badiozamani, K., 75-3805
 Baedecker, J. J., 75-2276, 2277, 2278
 Bagdasarov, Yu. A., 75-1173
 Bahnemann, K. P., 75-3702
 Bahu, C., 75-2848
 Bailey, A., 75-1059
 Bailey, D. K., 75-3732
 Bailey, E. H., 75-2652
 Bailey, G. W., 75-81
 Bailey, J. C., 75-2650
 Bailey, R. J., 75-3621
 Bailey, S. W., 75-1902, 3011
 Bain, G. W., 75-985
 Bain, J. A., 75-2068
 Baird, A. K., 75-3901
 Bakakin, V. V., 75-861, 3020
 Baker, P. E., 75-3759
 Bakr, M. Y., 75-240
 Bakshi, A. R., 75-705
 Baksi, A. K., 75-724, 746
 Bakumenko, I. T., 75-2453
 Balakirev, V. G., 75-3298
 Balasubramaniam, K. S., 75-481
 Baldwin, R. B., 75-2357, 2361
 Balek, V., 75-1797
 Balko, V. P., 75-3020
 Balkwill, H. R., 75-1692
 Ball, B., 75-1742
 Ball, T. K., 75-201
 Balla, Z., 75-2568
 Ballmann, P., 75-834
 Balogh, B., 75-1187
 Bambauer, H. V., 75-3142 (V.1)
 Banat, K., 75-2271
 Bancroft, G. M., 75-3490
 Bandermann, L. W., 75-1252
 Bandet, Y., 75-2809
 Banerjee, D. M., 75-1812
 Banerjee, N. N., 75-2230
 Banerjee, S., 75-2874, 3117
 Banerjee, S. K., 75-1662
 Banerji, A., 75-630
 Banerji, H., 75-229
 Bank, H., 75-1081-1089, 1091-1093, 1096, 1106-1111, 1295, 1296, 1327, 1338, 3315, 3318, 3884, 3888
 Banks, N. G., 75-494, 745, 920
 Banks, N. L., 75-1537
 Banno, S., 75-443, 1007, 1635, 3142, (1.2, 3), 3493
 Baragar, W. R. A., 75-345
 Barazangi, M., 75-2903 [7]
 Barker, C., 75-3388
 Barber, D. J., 75-2388
 Barberi, F., 75-3730
 Barbier, J., 75-323
 Barbier, M. J., 75-1964
 Barbosa, F. L. M., 75-966
 Barckhausen, J., 75-1168
 Barczak, V. J., 75-2126
 Bard, J.-P., 75-3640, 3852
 Bárdossy, Gy., 75-2479, 2484
 Bareja, E., 75-1171
 Bargar, K. E., 75-1505
 Barker, C., 75-1738
 Barker, F., 75-1725, 3711
 Barker, W. W., 75-882
 Barnea, Z., 75-3036
 Barnes, I., 75-964, 3412
 Barnes, R. G., 75-3673
 Barnett, M. E., 75-2852
 Barr, K. G., 75-1671
 Barr, M., 75-2554
 Barr, S. M., 75-1520, 1527
 Barrer, R. M., 75-3142 (I.1)
 Barret, P., 75-3200
 Barrett, P. J., 75-2829, 3119
 Barrington, R. C. A., 75-62
 Barron, B. J., 75-536
 Barron, L. M., 75-246, 1018
 Barrow, K. J., 75-1739
 Barsanov, G. P., 75-3048
 Bart, J. C. J., 75-2994
 Bartholomé, P., 75-908, 976
 Bartholomew, M. J., 75-2587
 Bartky, C. D., 75-2375
 Barton, C. M., 75-3632

- Barton, J. M., Jr., 75-2836
 Barton, P. B., Jr., 75-1030, 1043
 Bartov, Y., 75-2606
 Bartura, Y., 75-908
 Basham, I. R., 75-828
 Basily, A. B., 75-1789
 Bass, M. N., 75-612
 Bassett, W. A., 75-262, 681, 685, 3047, 3246
 Basta, E. Z., 75-1349
 Bastin, J. A., 75-2356
 Basu, A. R., 75-1510
 Bataliyeva, N. G., 75-303
 Bateman, R. L., 75-2958
 Bates, R. G., 75-1664
 Batory, D. M., 75-718
 Batts, B. D., 75-1240
 Batty, C. J., 75-1124
 Baturin, G. N., 75-362, 1558, 2830
 Baubron, J.-C., 75-2812
 Baum, W. A., 75-2794, 3917
 Baumer, A., 75-2134, 3142 (IV.6)
 Baur, W. H., 75-177
 Baussy, G., 75-1052
 Baweja, A. S., 75-815
 Baxter, J. L., 75-1429
 Bayley, R. W., 75-1437, 2014
 Baylor, R. Jr., 75-2130
 Baysal, O., 75-1855, 2597
 Bazarov, L. Sh., 75-332
 Bazarova, T. J., 75-3172
 Beach, A., 75-388
 Bearth, P., 75-1613
 Beasley, P., 75-2577
 Beaudoine, B., 75-3788
 Beaven, C. H. J., 75-62
 Beaver, J. P., 75-3063
 Beccaluva, L., 75-1224, 1441, 1494
 Béchenne, F., 75-3823, 3824
 Beck, J. N., 75-2381
 Becker, J., 75-3452
 Beckinsale, R. D., 75-386, 2244
 Beckmann, G. G., 75-1874
 Beek, J., 75-2927
 Beer, K. E., 75-2545
 Beg, M. M., 75-898
 Begizov, V. D., 75-557
 Behrens, E. W., 75-2675
 Belderson, R. H., 75-608
 Belichenko, V. P., 75-3526
 Bell, J. G., 75-3853
 Bellaiche, G., 75-1544
 Bellon, H., 75-727, 1704, 1710, 2843
 Belokoneva, E. L., 75-149
 Belonin, M. D., 75-945
 Belous, I. R., 75-206
 Belov, N. V., 75-149, 159, 861, 1877, 1910, 3006, 3060
 Belov, V. P., 75-643
 Belova, I. V., 75-364
 Belova, L. N., 75-548, 3551
 Beltagy, A. I., 75-3793
 Belyaev, L. M., 75-2733
 Belyayev, K. D., 75-3415
 Benedict, J. T., 75-3222
 Benedict, L. G., 75-2668
 Beneš, K., 75-2711
 Ben Harrath, A., 75-848
 Beňka, K. J., 75-1371
 Benkheiri, Y., 75-3448
 Bennett, H. J., 75-903
 Bennett, J. D., 75-3641
 Bennett, R. A., 75-1971
 Benson, L. V., 75-2261, 3378
 Bente, K., 75-2106
 Bentz, F. P., 75-2903 [37]
 Bentzen, E. H., III, 75-960
 Benvegnu', F., 75-926
 Ben-Yaakov, S., 75-390
 Beran, A., 75-860, 862, 3525
 Berard, M. F., 75-3237
 Bérczi, I., 75-2659
 Berdesinski, W., 75-1083, 1084, 1091, 1092, 1093, 1296, 1372, 3315
 Berendsen, P., 75-551
 Berenshteyn, L. Ye [E.], 75-2219
 Bergenback, R. E., 75-2669
 Berger, M. G., 75-86, 118
 Berger, R. L., 75-3207
 Berger, W. H., 75-2903 [16]
 Bergeron, C. G., 75-3245
 Bergstöl, S., 75-2501
 Berkhin, S. I., 75-486
 Berking, B., 75-866
 Bernard, A. J., 75-908
 Bernard-Griffiths, J., 75-1705
 Bernardová, E., 75-2706
 Bernat, M., 75-2216
 Berner, R. A., 75-3226, 3227
 Bernier, P., 75-1529
 Berry, L. G., 75-1935
 Berry, M. J., 75-1671
 Bershov, L. V., 75-490
 Berthomier, C., 75-561
 Bertine, K. K., 75-356, 2296
 Bertrand, G., 75-3150
 Bertrand, J., 75-1610
 Bertrand-Sarfati, J., 75-2833
 Berzilin, N. N., 75-2964
 Berzina, I. G., 75-52, 353
 Besenecker, H., 75-2638
 Bessi, C., 75-2440
 Besson, G., 75-1825
 Besson, H., 75-2162
 Best, M. G., 75-1463, 3712
 Beswick, D. M., 75-2518
 Béthune, P. de, 75-3456
 Bettetini, E., 75-756
 Beukes, N. J., 75-2220
 Beutelspacher, H., 75-2907 (1)
 Bevan, J. C., 75-1308
 Bevzenko, P. Ye [E.], 75-1448
 Bewers, J. M., 75-1194
 Beyer, H., 75-1281
 Bezrodnov, V. D., 75-3411
 Bezrodnikh, Yu. P., 75-208
 Bezrukov, G. N., 75-509
 Bhadra, A. K., 75-2874
 Bhalla, J. K., 75-13
 Bhandari, L. L., 75-1562
 Bhanot, V. B., 75-13
 Bhardwaj, B. D., 75-2393
 Bhatnagar, G. C., 75-705
 Bhatia, G. S., 75-1812
 Bhatia, S. B., 75-2486
 Bhatt, J. J., 75-379
 Bhattacharji, S., 75-560
 Bhattacharya, T. K., 75-2240
 Biaholowska, A., 75-341
 Bibby, D. M., 75-782, 1345, 2882, 2900
 Bibent, B., 75-2963
 Bickford, T., 75-3749
 Bickle, M. J., 75-3766
 Bideaux, R. A., 75-2531, 3595
 Bidgwood, D. E. T., 75-3139
 Bigarella, J. J., 75-2906
 Bigelow, W. C., 75-2523
 Biggar, G. M., 75-255, 261, 287, 1069, 1250, 2101, 3165, 3166
 Bignell, R. D., 75-1955
 Bijou-Duval, B., 75-614, 2903 [52]
 Bickerman, M., 75-1700
 Bild, R. W., 75-1267
 Biley, J. C., 75-1154
 Billings, G. K., 75-1741
 Billy, C., 75-3228
 Bilonizhka, P. M., 75-1382
 Binda, P. L., 75-908
 Bingham, D. K., 75-3874
 Bingham, F. T., 75-2945
 Binns, P. E., 75-1515, 2538
 Binz, C. M., 75-1273
 Binzer, K., 75-2443
 Birch, G. F., 75-1000
 Birck, J. L., 75-3439
 Bird, G. W., 75-3254
 Birkeland, P. W., 75-56
 Birnie, R. W., 75-3755
 Biscaye, P. E., 75-1569
 Bischoff, J. L., 75-942, 3402
 Biswas, D. K., 75-2405
 Bittner, H., 75-860
 Bizouard, H., 75-2596
 Bjørlykke, K. O., 75-2265, 3516
 Black, D. C., 75-1258, 3912
 Black, G. P., 75-197
 Black, L. P., 75-733, 735
 Black, P. M., 75-462, 1190, 3504
 Blackburn, W. H., 75-2688
 Blackwelder, P. L., 75-2454
 Blagoveschenskaya, M. N., 75-595
 Blagovidov, V. V., 75-2066
 Blake, D. H., 75-1455
 Blake, M. C., Jr., 75-2652, 2903 [63]
 Blake, W., Jr., 75-18, 736
 Blakeslee, K. C., 75-3054
 Blan, M.-C., 75-2933
 Blaxland, A. B., 75-19
 Blinov, V. A., 75-3006
 Blockley, J. G., 75-3109
 Blom, G. I., 75-117
 Blom, Th. J. M., 75-2927
 Bloomfield, K., 75-3748
 Bloss, F. D., 75-2844, 2845
 Blount, C. W., 75-2113
 Bloxam, T. W., 75-354, 355
 Bluman, B. A., 75-513
 Blümel, P., 75-1627
 Bobyleva, M. I., 75-2206
 Boca, M., 75-1655
 Bocchi, G., 75-2508
 Bocchio, R., 75-2701
 Bocquet, J., 75-3, 1312, 1609, 3456, 3830
 Bodenheimer, P., 75-2781
 Bodine, M. W., Jr., 75-2889
 Boeser, R. S., 75-1432
 Boettcher, A. L., 75-3270, 3271
 Bogda, A., 75-2918
 Bogdanov, N. A., 75-3764
 Bogdanov, Yu. V., 75-3073
 Bogdanova, S. V., 75-7
 Boger, P. D., 75-361
 Bogush, I. A., 75-1500
 Böhler, R., 75-2173
 Bohlin, L., 75-2744
 Bohor, B. F., 75-84, 3375
 Boisvert, M., 75-759
 Bojakowski, T., 75-1850
 Boksha, O. N., 75-2727
 Boland, J. N., 75-863
 Boldyrev, V. L., 75-204
 Boldyreva, M. M., 75-1365
 Bolfa, J., 75-3142 (II.4)
 Bolotnikov, A. F., 75-2212
 Bolsanello, A., 75-2906
 Bol'shakov, A. P., 75-206
 Bolwijn, P. T., 75-3306
 Bolze, C. E., 75-1202
 Bombré, F., 75-3215
 Bonasia, V., 75-3725
 Bonatti, E., 75-3770
 Bond, G., 75-731
 Bondar', I. A., 75-303
 Bondarenko, V. P., 75-2096
 Bonis, S., 75-3749, 3750
 Bonner, W. A., 75-1687
 Bonpunt, L., 75-3142 (I.7, II.7)
 Boom, G. van der., 75-2319
 Booth, B., 75-2631
 Booth, P. W. K., 75-2619
 Booth, S. J., 75-3331
 Bora, M. N., 75-2730
 Boray, A., 75-3838
 Borg, I. Y., 75-2421, 3219
 Borg, R. J., 75-2421
 Borisenko, L. F., 75-520
 Borishanskaya, S. S., 75-529
 Borley, G. D., 75-1302, 2611
 Born, L., 75-1689
 Borodayevskaya, M. B., 75-205
 Borovec, Z., 75-3857
 Borovikova, G. A., 75-2257
 Borrás, J. B., 75-849
 Boscardin, M., 75-1801
 Bosch, C. J., 75-259
 Bösch, I., 75-1925
 Bose, M. K., 75-2448
 Bosma, W., 75-224, 232, 340
 Bostick, N. H., 75-2668
 Boström, K., 75-2262, 2471, 3366, 3367, 3368
 Boswell, C. R., 75-2339
 Botbol, J. M., 75-3092
 Botha, B. J. V., 75-2614
 Bott, M. H. P., 75-3620
 Bottinga, Y., 75-2088
 Boughton, L. D., 75-3133
 Boulègue, J., 75-3407, 3408
 Boullier, A. M., 75-3819
 Boulmier, J. L., 75-369
 Boulter, C. A., 75-2428
 Bourreau, E., 75-3336
 Bourguignon, P., 75-830
 Boussari, W., 75-3639
 Bousteyak, L., 75-2820
 Boutron, P., 75-2997
 Bouvier, J. L., 75-43
 Bowden, A. A., 75-3608
 Bowden, P., 75-2818
 Bowen, O. E., 75-239
 Bowes, D. R., 75-1700, 3398
 Bowie, S. H. U., 75-197
 Bowman, J. R., 75-2247
 Bown, M. G., 75-1895
 Boyd, W. W., Jr., 75-3682
 Boyer, D., 75-3877
 Boyer, F., 75-3083
 Boyle, E., 75-1211
 Boyle, R. W., 75-2325, 3552
 Bradshaw, P. M. D., 75-2328
 Bradshaw, R. L., 75-3896
 Brady, J. B., 75-468
 Brady, L. L., 75-1019
 Braids, O. C., 75-2907 (6)
 Braga da Cruz, A. M., 75-2018
 Bragin, Yu. N., 75-119
 Brändle, J. L., 75-48
 Branthheim, T., 75-2293
 Brantley, F. E., 75-909
 Brass, G. W., 75-2310
 Brätter, P., 75-2121
 Bratzel, M. P., Jr., 75-767
 Braud, J., 75-1422
 Braude, I. S., 75-185
 Braun, E., 75-655
 Braven, J., 75-804

- er, A., 75-2382
 er, W. J., 75-1508
 er, I., 75-470
 erner, J. M., 75-2926
 erner, D. J., 75-1685
 erner, N. L., 75-1011
 er, R., 75-554, 1254
 er, M. S., 75-1707
 er, R., 75-1739
 G., 75-2144
 e, P. J., 75-550, 553,
 002, 2439
 water, D., 75-1601
 s, D. A., 75-2068
 s, G. A., 75-2797
 L., 75-933
 lley, G. W., 75-108, 792,
 955
 lley, J. C., 75-441, 452,
 64, 2595, 3657, 3658
 kmann, D., 75-3287, 3288
 kmann, R., 75-1206
 ol, C. C., 75-3114
 dhurst, S. D., 75 2768
 st, D. A., 75-501
 k, K. J., 75-2431
 erick, T. J., 75-3670
 ecker, W. S., 75-271, 1570,
 303, 2307
 m, I., 75-3367
 lley, A. V., 75-1957
 di, A., 75-926, 1545
 gersma-Sanders, M.,
 75-2054
 kins, D. G., 75-88, 2249,
 606, 2629, 2842
 ks, C., 75-1137
 ks, C. K., 75-3681
 ks, J. H., 75-219, 953
 ks, M., 75-1407
 ks, R. R., 75-2339
 chers, R. N., 75-672
 erton, P. D., 75-1916,
 1944
 ighton, P. L., 75-1367,
 2053, 2182, 2192, 3310
 usse, R., 75-3728
 witt, C. W. A., 75-3620
 wn, A. C., 75-908
 wn, E. H., 75-474
 wn, F. F., 75-870
 wn, F. W., 75-2871
 wn, G., 75-818, 830
 wn, G. C., 75-1402
 wn, G. E., 75-1390, 2999
 wn, G. L., 75-2850
 wn, G. M., 75-1241, 1519
 wn, J. E., 75-1534
 wn, J. J., Jr., 75-2130,
 3204, 3243
 wn, J. R., 75-3490
 wn, J. S., 75-1183
 wn, R. W., 75-1236
 wn, W. L., 75-157, 682
 wne, P. R. L., 75-1362,
 2488
 ick, P. M., 75-563
 ickert, S., 75-2970
 eckner, H. K., 75-1699,
 2248
 nel, M., 75-168, 1409
 nfelt, A. O., 75-38, 3361
 no, E., 75-1907, 3142
 (V.5)
 ty, D., 75-1174
 an, W. B., 75-3674
 ant, W. R., 75-2226, 2903
 [51]
 bela, B., 75-1203
 chanan, K. R., 75-712
 Buchi, S. H., 75-2409
 Buckley, B. W., 75-2762
 Buckley, J. S., 75-3621
 Budanov, V. I., 75-596, 1497
 Budkiewicz, M., 75-2966
 Bugrov, V., 75-2338
 Bulakh, A. G., 75-464
 Bull, W. R., 75-1743
 Bullen, K. E., 75-1694, 1800
 Buller, A. T., 75-1536
 Bulnayev, K. B., 75-2823
 Bunch, T. E., 75-3470
 Bundy, W. M., 75-102
 Bunker, C. M., 75-2004
 Buol, S. W., 75-2972
 Burger, A. J., 75-2819
 Burgess, I. C., 75-2540
 Burgess, J. D., 75-2668
 Burk, C. A., 75-2903 [1, 71]
 Burke, K., 75-2641
 Burkett, J., 75-710
 Burley, A. J., 75-2545
 Burley, B. J., 75-3019
 Burlingame, A. L., 75-1187
 Burn, R. G., 75-2045
 Burnett, A. D., 75-795, 1847
 Burnham, C. W., 75-1067, 1914,
 3142 (III.1)
 Burns, R. G., 75-146
 Burova, T. A., 75-460
 Burri, P., 75-1554
 Burshtar, M. S., 75-3637
 Burzlaff, H., 75-857, 858
 Buseck, P. R., 75-1930, 2389,
 3417
 Buser, S., 75-972
 Bussen, I. V., 75-1394
 Butler, G. P., 75-2507, 2662
 Butler, J. R., 75-604
 Butler, J. Robert, 75-1722
 Butler, P., 75-3426
 Butler, R. F., 75-1662
 Butsko, N. I., 75-686
 Butt, N. M., 75-189, 898
 Butti, C., 75-3215
 Button, A., 75-3700
 Butuzov, V. P., 75-509, 2466
 Buzinova, V. M., 75-393
 Bykhovskiy, L. Z., 75-3089
 Bykov, V. P., 75-556, 3533
 Bykova, A. V., 75-2524, 2526,
 2532
 Caballero, M. A., 75-3295, 3563
 Cabri, L. J., 75-1029, 1968,
 3211, 3534, 3603-3605
 Caby, R., 75-2833
 Cadogan, P. H., 75-1246
 Cağatay, A., 75-973
 Cagle, F. R., Jr., 75-2661
 Cahen, L., 75-908
 Caillère, S., 75-2162, 2941,
 2985, 3336, 3445
 Cailteux, J., 75-908
 Calamiotou, M., 75-687
 Calanchi, N., 75-2508
 Caldo, A. del Moro, C., 75-1801
 Caldwell, D. W., 75-2559
 Calembert, L., 75-3787
 Calk, L. C., 75-3739
 Calleri, M., 75-1907, 3016
 Calvo, C., 75-1915, 1943
 Camerlynck, J. P., 75-812
 Cameron, A. G. W., 75-2201,
 2378, 2777
 Cameron, E. M., 75-315, 412,
 416
 Cameron, I. R., 75-426
 Cammann, K., 75-1708
 Camp, D. C., 75-1131
 Campbell, E. Y., 75-40
 Campbell, I. G. C., 75-1080
 Campbell, I. H., 75-1302, 2146
 Campbell, W. C., 75-42
 Campos, C. W. M., 75-2903 [32]
 Campsie, J., 75-1154, 2650
 Camus, G., 75-3660
 Canilho, M. H., 75-3663
 Cann, J. R., 75-1567
 Canterford, J. H., 75-1962
 Capen, R. C., 75-3910
 Carapezza, M., 75-1987
 Carbonnel, J.-P., 75-2901
 Carden, J. R., 75-2249
 Caretta, E., 75-2890
 Carleton, N. P., 75-2374
 Carlisle, D., 75-2557
 Carlson, J. R., 75-842
 Carlsson, E., 75-2293
 Carlton, R. W., 75-822
 Carme, F., 75-1605
 Carmichael, I. S. E., 75-57, 607
 Carmisciano, R., 75-2636
 Carollo, C., 75-1736
 Carpenter, H. C., 75-2074
 Carpenter, R., 75-373
 Carr, M. H., 75-1247, 2786,
 2793
 Carr, M. J., 75-2903 [9], 3751,
 3752
 Carr, R. M., 75-99
 Carrat, H.-G., 75-589, 3689
 Carson, B., 75-2916
 Carstens, H., 75-3449
 Carswell, D. A., 75-1595, 2590
 Carta, A., 75-2375
 Carter, G. L., 75-2760
 Carter, J. D., 75-3118
 Carter, P. G., 75-1656
 Cartraud, P., 75-3307
 Caruba, R., 75-1009, 2134,
 3142, (IV.6, 7)
 Casagrande, D. J., 75-1020
 Case, A. A., 75-1133
 Case, J. E., 75-2903 [54]
 Caslavsky, J. L., 75-2468
 Cass, R. D., 75-3435
 Cassedanne, J. O., 75-3309
 Cassedanne, J. P., 75-3309
 Castaño, J. R., 75-2668
 Castleman, A. W., Jr., 75-1220
 Catalano, P. G., 75-3787
 Cathles, L. M., 75-1509
 Catti, M., 75-1926
 Cavallone, F., 75-2994
 Cavaroc, V. V., 75-3810
 Cawthorn, R. G., 75-2412, 3679
 Čech, F., 75-2020, 2478
 Černý, P., 75-3461, 3548
 Cerveira, M. I., 75-48
 Cerveille, B., 75-1262, 1647,
 2848
 Cezairliyan, A., 75-1752
 Cháb, J., 75-2706
 Chaikovskaya, N. M., 75-272
 Chaix, R. P., 75-782
 Chakrabarti, C. L., 75-767
 Chakraborti, D., 75-1767
 Chakraborty, D., 75-2174
 Chakranarayan, A. B., 75-582
 Chakrapani Naidu, M. G.,
 75-2322
 Challis, G. A., 75-3532
 Chalov, P. I., 75-2822, 2830
 Chambers, A. L., 75-3690
 Chamley, H., 75-832
 Champness, P. E., 75-461, 1326,
 1328, 1882, 2444
 Chan, H.-C., 75-334
 Chan, T., 75-1663
 Chandola, L. C., 75-2898
 Chandra, D., 75-635
 Chandrasekharan, D., 75-2588
 Chang, I. L. Y., 75-3210, 3213,
 3579
 Chang, J.-H., 75-923
 Chang, J.-P., 75-2418
 Chang, K.-L., 75-2403
 Chang, P.-K., 75-475
 Chang, S., 75-422, 2349
 Chang, T.-C., 75-3108
 Chang, Y.-S., 75-2031
 Chanh, N. B., 75-3142 (I.7)
 Chao, E. C. T., 75-3428
 Chao, G. Y., 75-3581, 3594,
 3596
 Chao, P., 75-2150, 2522
 Chao, P.-C., 75-2116
 Chao, T. T., 75-2270
 Chapman, C. R., 75-3441, 3905,
 3906
 Chapman, N. A., 75-1438
 Chapman, P. A., 75-1730
 Chapman, W. B., 75-2354
 Chappell, B. W., 75-1432
 Charbonnier, M., 75-3218
 Charlat, M., 75-3142 (IV.2)
 Charles, R. W., 75-289
 Charlot, R., 75-2814
 Charoy, B., 75-3351
 Chase, A. B., 75-3242
 Chase, R. L., 75-1520
 Chasen, E., 75-1044
 Chassin, P., 75-2933
 Chaterji, G. C., 75-2514
 Chatterjee, A. C., 75-2569,
 2578
 Chatterjee, N. D., 75-1064,
 2156
 Chatterjee, S. D., 75-403
 Chatterjee, S. K., 75-11
 Chattopadhyay, B., 75-1473
 Chaudhuri, K. D., 75-1733
 Chauhan, D. S., 75-2028
 Chaussidon, J., 75-1901
 Chauvel, J. J., 75-3091
 Chavadi, V. C., 75-1453
 Chayka, V. M., 75-1192
 Che, M., 75-1881
 Cheetham, A. K., 75-189
 Cheilletz, A., 75-3096
 Chen, C.-N., 75-794
 Chen, H. T., 75-3130
 Chen, J. T., 75-1234
 Chen, P. Y., 75-1234, 2433
 Chen, T. T., 75-3213, 3579,
 3581
 Chenevov, M., 75-3829
 Cheney, E. S., 75-2044
 Cherdyntsev, V. V., 75-1156
 Cherepanov, V. A., 75-25
 Chernikov, A. A., 75-2527
 Chernitsova, N. M., 75-539
 Chernobrov, B. S., 75-3637
 Chernosky, J. V., Jr., 75-279,
 3499
 Chernyayev, A. M., 75-3334
 Chernyayeva, L. Ye [E].,
 75-3334
 Chernysheva, L. V., 75-3541
 Chernysheva, V. I., 75-1523,
 2649
 Chester, R., 75-1174, 1576,
 3793, 3794
 Chesterman, C. W., 75-2207
 Chesworth, W., 75-2947
 Cheung, J. B., 75-2743
 Cheverry, C., 75-2934
 Chi, J. M., 75-979

- Chi, L.-Y., 75-1352
 Chiari, G., 75-1907
 Chigareva, O. G., 75-3264
 Childs, B. G., 75-3195
 Childs, J. G., 75-3041
 Chiling, G. V., 75-123
 Chinner, G. A., 75-1597
 Chistyakov, V. K., 75-2998
 Chistyakova, M. B., 75-3491
 Chmeleff, J., 75-773
 Cho, S.-A., 75-1933
 Chodak, T., 75-2918
 Choi, C. S., 75-176
 Chou, C.-Y., 75-3322
 Chou, I.-M., 75-2224
 Chouard, C., 75-41
 Choubert, G., 75-2815, 2816
 Chouet, B. A., 75-2634
 Christ, C. L., 75-1047, 3275
 Christian, R. P., 75-2482
 Christiansen, E. A., 75-846, 3068
 Christiansen, P., 75-1187
 Christiansen, R. L., 75-402
 Christie, O. H. J., 75-3142 (II.6)
 Christie, J. M., 75-2344
 Chromý, S., 75-757
 Chronic, J., 75-2560
 Chuang, T.-F., 75-764
 Chukhrov, F. V., 75-783
 Chung, Y., 75-2307
 Chung, Y.-C., 75-1735, 2298, 2308
 Church, M., 75-2299
 Church, T. M., 75-2216
 Churchman, G. J., 75-99
 Cierniewska, M., 75-970
 Cieśla, W., 75-2918
 Civetta, L., 75-1165
 Clague, J. J., 75-1580
 Clanton, U. S., 75-2847
 Clapp, C. E., 75-105
 Clark, A. L., 75-956
 Clark, B. C., 75-3901
 Clark, B. R., 75-1034
 Clark, L. A., 75-584
 Clarke, D. B., 75-287
 Clavaud, C., 75-3307
 Clayton, R. N., 75-427
 Cleary, W. J., 75-2670, 3795
 Clee, T. E., 75-1671
 Clemency, C. V., 75-2864
 Clementz, D. M., 75-78, 813
 Clemmey, H., 75-908
 Cleverley, W. H., 75-3451
 Cliff, G., 75-1328, 3480
 Clifford, M. J., 75-996
 Clifford, T. N., 75-2819, 3837
 Clocchiatti, R., 75-1333, 1336
 Cloos, P., 75-812
 Closs, H., 75-2903 [46]
 Cloud, P., 75-2197, 2225
 Cobb, E. H., 75-220
 Coe, R. S., 75-282
 Coey, J. M. D., 75-1172
 Coffey, A. L., Jr., 75-3024
 Coffman, C. B., 75-796
 Coffrant, D., 75-1604
 Cogné, J., 75-2811, 3628
 Cohen, A. J., 75-497, 498
 Cohen, J. B., 75-2099, 3202
 Cohen, L. H., 75-3292
 Cointot, A., 75-3307
 Cole, D., 75-1693
 Cole, W. F., 75-174, 798
 Coleman, R. G., 75-2903 [55, 67]
 Colgate, S. A., 75-1502
 Collerson, K. D., 75-1600, 2412
 Colley, H., 75-1506
 Collier, R., 75-1211
 Collins, D. N., 75-62
 Collongues, R., 75-3142 (II.2)
 Colony, W. E., 75-1507
 Compagnoni, R., 75-1606, 1608
 Compton, W., 75-1197, 1718
 Conato, V., 75-3787
 Condie, K. C., 75-345, 1437, 3710
 Condit, C. D., 75-3907
 Condrate, R. A., Sr., 75-2129, 3054
 Conel, J. E., 75-684
 Coni, J., 75-2112
 Connan, J., 75-370
 Conniff, J. J., 75-640
 Connor, B. P., 75-576
 Conolly, J. R., 75-1432, 2670, 3795
 Constantinou, G., 75-2023
 Coogan, A. H., 75-3773
 Cook, E. B. T., 75-761
 Cook, P. J., 75-3380
 Cook, P. M., 75-1201
 Cooley, R. F., 75-3186, 3188
 Cooper, M. J., 75-186
 Copelowitz, I., 75-3421
 Copley, P. A., 75-461
 Corazza, E., 75-885, 1927
 Corba, J., 75-2865
 Corbett, E. B., 75-1454
 Corbett, K. D., 75-1454
 Cordell, B. M., 75-2796
 Cormier, R. F., 75-739, 740
 Correa, A. V., 75-3543
 Correia, H., 75-1556
 Correia, M., 75-2632
 Correia Neves, J. M., 75-2521
 Corsini, F., 75-1361
 Cortecchi, G., 75-1205
 Cotton, W. R., 75-1646
 Coulon, C., 75-1158
 Courrier, P., 75-2903 [52]
 Courtillot, V., 75-2754
 Courtois, C., 75-3363
 Courty, G., 75-3103
 Cowart, J. B., 75-1199
 Coward, M. P., 75-2554, 2716
 Cox, D. P., 75-3097
 Cox, K. G., 75-58, 1472
 Craig, D. F., 75-3205
 Craig, H., 75-2298, 2300, 2306, 2307
 Craig, J. R., 75-886, 1043, 2496, 3209, 3210
 Cramer, Mrs. B., 75-2763
 Crampton, D., 75-1714
 Crandell, D. R., 75-3742
 Cranwell, P. A., 75-2281
 Crawford, W. A., 75-1481
 Creager, J. S., 75-3802
 Creasey, S. C., 75-3065
 Creer, K. M., 75-1727, 2749, 2752
 Cremers, A., 75-806, 807, 2932
 Crenshaw, G. L., 75-763
 Cressy, P. J., Jr., 75-1272
 Cribb, S. J., 75-726
 Crick, F. H. C., 75-3899
 Criddle, A. J., 75-2483
 Cristy, S. S., 75-1126
 Croker, M. N., 75-2077
 Cronan, D. S., 75-1176, 1571, 1572, 1573, 1574, 2229
 Crook, K. A. W., 75-3771
 Cropton, R. W. G., 75-62
 Crossland, B., 75-1753
 Crouzel, F., 75-614
 Crowder, D. F., 75-1483
 Crowley, J. A., 75-1294
 Crowningshield, R., 75-1097
 Croxford, N. J. W., 75-1143, 2034
 Crozier, J., 75-912
 Cruft, E. F., 75-2116, 2661
 Cruikshank, M. J., 75-2903 [70]
 Cruz, L. B. S., 75-1542
 Cruz, M. I., 75-84
 Cruzat, A. C. E., 1226
 Csalagovits, I., 75-1973
 Cubitt, J. M., 75-639
 Cuif, J.-P., 75-2870
 Cukierman, M., 75-423
 Cumming, G. L., 75-1259
 Cummings, D., 75-1283
 Cundari, A., 75-3699
 Cuney, M., 75-3102
 Cunningham, C. G., Jr., 75-3070
 Curray, J. R., 75-2903 [45]
 Currie, J. B., 75-1435
 Curry, D. J., 75-407
 Curtin, G. C., 75-1229, 2329
 Curtis, C. D., 75-1595
 Cvetic, S., 75-972
 Cybulski, C., 75-3883
 Czamanske, G. K., 75-3531
 Czerminski, J., 75-1149
 Czygan, W., 75-2341
 Czyscinski, K., 75-1568
 Dacey, M. F., 75-1812
 Dagbert, M., 75-760
 Dagley, P., 75-730
 Dahlberg, E. H., 75-676
 Daily, B., 75-1638
 Dall'Aglio, M., 75-772
 Dallmeyer, R. D., 75-1643, 2837
 Dalmayrac, B., 75-3852
 Dal Negro, A., 75-3031, 3052, 3061
 Dal Piaz, G. V., 75-1411, 1609
 Dalrymple, G. B., 75-1
 Dalteil, J.-R., 75-2903 [22, 24]
 Dalziel, I. W. D., 75-2903 [40]
 Damberger, H. H., 75-2668
 Damiani, V., 75-1587
 Damon, P. E., 75-723
 Daniels, D. L., 75-1664
 Daniels, J. L., 75-1428, 3642
 Danilov, F. V., 75-3697
 Darbyshire, D. P. F., 75-2520, 2538
 Darlington, C. N. W., 75-3029
 Darot, M., 75-3693
 Darragh, P. J., 75-2187
 Dars, R., 75-1009
 Das, B. K., 75-1812
 Das, M. K., 75-1767
 Das, S. N., 75-2268
 Dasgupta, D. R., 75-143, 264
 Da Silva, J. C. G., 75-989
 Dass, A. S., 75-482
 Datar, A. G., 75-823
 Datta, P., 75-867
 David, M., 75-62, 760
 Davidson, L. R., 75-1298
 Davies, M. E., 75-2790
 Davies, M. M., 75-354
 Davies, P. J., 75-2264
 Davies, T. A., 75-2647, 3761
 Davis, B. E., 75-2925
 Davis, C. E., 75-23
 Davis, G. H., 75-984
 Davis, G. R., 75-1983, 2017
 Davis, J. C., 75-2904
 Davis, P. K., 75-421
 Davy, R., 75-3339
 Daw, J. D., 75-3274
 Dawson, K. R., 75-2001
 Day, D. S., 75-1480
 Day, H. W., 75-2078, 3157
 Dayal, R., 75-1985
 de Abeledo, M. E. J., 75-268
 de Albuquerque, C. A. R., 75-469
 Dealing, T. E., 75-3426
 Dean, D. A., 75-2860
 Dean, W. E., Jr., 75-2887
 Dear, P. S., 75-3243
 Dearnley, R., 75-1513
 Debelle, V., 75-1924
 Debelmas, J., 75-1802
 de Benyacar, M. A. R., 75-261
 de Bergevin, F., 75-168
 De Boer, J. J., 75-1922
 Debon, F., 75-3659, 3661
 Debrabant, P., 75-3387
 Decarreau, A., 75-3376
 Decker, R. W., 75-3733
 De Couto Moreira, J. F., 75-9
 Deelman, J. C., 75-2863
 de Fino, M., 75-1165, 3729
 Deganello, S., 75-864
 Degens, E. T., 75-313, 1209
 Dein, J. L., 75-1659
 Deines, P., 75-1198
 Dejou, J., 75-2975
 Dekolyado, R. I., 75-3738
 Delabio, R. N., 75-17
 de la Calle, C., 75-2940
 de Laeter, J. R., 75-53, 1260, 1263, 1264, 3706
 De La Hunty, L. E., 75-1427
 Delaloye, M., 75-3
 Delanoë, Y., 75-3629
 de la Roche, H., 75-411, 1464
 Delarue, C., 75-3728
 Delbove, F., 75-3142 (I.9)
 Delfaud, J., 75-614
 Del Fiore, G., 75-780
 Delitsyna, L. V., 75-252, 1071
 Dell, C. I., 75-1376
 de Magnée, I., 75-908
 Delmas, A.-B., 75-2959
 Delmas, M. R., 75-616
 Del Moro, A., 75-1709
 Deloye, F. X., 75-2869
 Demant, A., 75-3713
 Demovič, R., 75-3381, 3393
 Dence, M. R., 75-435
 Dengler, A. T., 75-1211
 Denisenko, V. K., 75-945
 Denudt, G., 75-3419
 Depciuch, T., 75-2567
 de Portilla, V. I. S., 75-183
 Dergunov, V. V., 75-3048
 Dern, H., 75-1005, 1077
 de Roever, E. W. F., 75-455
 Derré, C., 75-727
 Derry, D. R., 75-3068
 Derycke, F., 75-3835
 Desborough, G. A., 75-507, 773510, 3531, 3711
 Deshpande, G. G., 75-582
 Deshpande, P. D., 75-1918
 Desmarais, D. J., 75-2352
 Desnoyers, C., 75-3446
 de Souza, J., 75-2955
 Desprairies, A., 75-3789
 De Swardt, A. M. J., 75-2977
 Deutsch, S., 75-2811
 Devaraju, T. C., 75-2720
 Devenish, M., 75-62
 Devine, S. B., 75-1740
 De Vos, W., 75-908
 Devries, R. C., 75-508
 de Waal, S. A., 75-3544, 3545, 3739

- et, J. D., 75-3250
 ey, J. F., 75-2903 [68]
 ijs, H. J., 75-62
 it, M. J., 75-1641, 3536
 T. K., 75-1733
 l., 75-3049
 enne, G., 75-3142 (II.2)
 B. L., 75-2717
 wan, B. L., 75-824
 attistini, G., 75-1492, 1493
 ey, J. S., Jr., 75-2684
 inson, W. R., 75-1686
 on, B. L., 75-1898
 on, F. W., 75-527, 1039
 l. R., 75-1091, 1092
 sel, C. F. K., 75-3846
 ich, R. V., 75-2587
 ich, V., 75-1610
 z, R. S., 75-1282
 hit, O. M., 75-1956
 an, Ye [E], N., 75-265
 unche, F., 75-908, 1845
 roth, E., 75-3091
 G. A., 75-1128
 le, R. V., 75-1000
 enko, V. Ye [E], 75-3416
 ane, J.-C., 75-637, 1583
 Paola, G. M., 75-3723
 mplicio, P., 75-1709
 enayake, C. B., 75-2235
 mer, F., 75-1154
 akara Rao, V., 75-2555,
 397
 n, C. J., 75-1958
 n, J. B., 75-104
 n, K., 75-761, 1764, 2872,
 875
 trik, A. L., 75-173, 883
 retsov, N. L., 75-2905
 son, M. R., 75-1539, 3622
 ed, R. T., 75-428, 429, 430
 ege, F. C. W., 75-374
 pel, J. J. G., 75-1430
 ring, W. P., 75-2241
 ur, G., 75-784
 g, R., 75-2836
 uchayeva, V. S., 75-3415
 llase, W. A., 75-141, 2988
 llfus, A., 75-2782
 minikovskiy, G. G., 75-3636
 aldson, C. H., 75-1468,
 3144, 3173
 aldson, J. R., 75-2668
 nderer, E., 75-45
 inay, G., 75-1321, 2992,
 3142 (II.3)
 inay, J. D. H., 75-850, 858,
 1321, 1883, 2992, 3142
 (II.3)
 moso, E., 75-2729
 novan, R. N., 75-3619
 ns, J. A., 75-561
 nville, B., 75-2809
 pel, E. H., 75-1094
 rman, J., 75-2353
 rnberger-Schiff, K., 75-150
 rr, J. Van N., II., 75-2015
 rsey, H. G., 75-2302, 2305
 rt, D. S., 75-2509
 rt, W., Jr., 75-2509
 stal, J., 75-2723
 ugan, Th. W., 75-675
 wnes, M. J., 75-1299
 wnes, K., 75-578
 wnie, C., 75-563
 wty, E., 75-1896, 2342, 2345
 zono, M., 75-1866
 ábek, M., 75-3560
 ach, V. v., 75-1707, 2238
 ake, C. L., 75-2903 [1, 9, 71]
 Drake, M. J., 75-2082
 Drees, L. R., 75-827
 Dressler, B., 75-1281
 Drever, H. I., 75-1468
 Dreyer, W., 75-1803, 1804
 Drita, V. A., 75-173, 883
 Driver, E. S., 75-2903 [21]
 Drozd, R. J., 75-1237, 2318
 Drummond, K. J., 75-2903 [59]
 Drury, J. S., 75-1125
 Drury, S. A., 75-1189
 Druzhinin, I. P., 75-3791
 Drysdale, D. J., 75-2151
 Dubakina, L. S., 75-557, 1398,
 3568
 Dubar, G. P., 75-1560
 Dubey, M., 75-879
 Dubey, R. K., 75-2879
 Dubinchuk, V. T., 75-1558
 Dublyanskiy, V. N., 75-535
 Dubois, J., 75-2903 [37]
 Duboul-Razavet, C. A., 75-614
 Duce, R. A., 75-3413
 du Chaffaut, S. A., 75-1416
 Dudek, A., 75-1629, 2709
 Du Dresnay, R., 75-1554
 Duennebier, F., 75-2353
 Duffield, A. M., 75-2380
 Duffield, W. A., 75-3740
 Duffus, H. J., 75-697
 Duggan, M. B., 75-3705
 Duncan, J. F., 75-2160
 Dungworth, G., 75-2205
 Dunham, K. C., 75-197, 2210,
 3064, 3072, 3686
 Dunn, A., 75-708
 Dunn, C. E., 75-1166
 Dunn, P. J., 75-1095, 2188,
 2530, 3312
 Dupuy, C., 75-348, 1158, 3360
 Durand, B., 75-369
 Durand, J.-P., 75-2961
 Durgaprasada Rao, N. V. N.,
 75-1565
 Durham, C. C., 75-412
 Durham, J. J., 75-2244
 Durkovic, T., 75-1178
 Đurovič, S., 75-1911
 Durst, T. L., 75-2867
 Dutcher, R. R., 75-2668
 Duursma, E. K., 75-259
 Duvigneaud, P. H., 75-2102
 Duxbury, T., 75-3909
 Dwornik, E. J., 75-1320, 3553
 D'yachenko, A. P., 75-210
 Dyakonov, Yu. S., 75-513
 Dykbad, J. P., 75-26
 Dyck, W., 75-2323
 Dyni, J. R., 75-2283
 Dzhumaliyev, T. D., 75-1561
 Dziejowski, A. M., 75-3653
 Dzyuba, A. S., 75-546
 Eade, K. E., 75-2838
 Eadington, P. J., 75-1786
 Eales, H. V., 75-2619, 2686
 Eardley, A. J., 75-2062
 Eassel, A., 75-1845
 Easton, A. J., 75-2401
 Ebens, R. J., 75-1133
 Eberhardt, P., 75-2087, 3429
 Eberlein, G. D., 75-2482
 Echle, W., 75-1549
 Economou, C., 75-2985
 Eddy, B. T., 75-49, 2882, 2900
 Edenharter, A., 75-1934
 Edgar, A. D., 75-2577
 Edgar, N. T., 75-2903 [17]
 Edholm, O., 75-2903 [26]
 Edmond, J. M., 75-1211
 Edmonds, E. A., 75-1408
 Edmunds, W. M., 75-3401
 Edwards, A. M. C., 75-1207
 Edwards, R. N., 75-1658
 Edwards, R. P., 75-1976
 Edzwald, J. K., 75-2982
 Efurd, D. W., 75-2381
 Egan, W. G., 75-3436
 Eggler, D. H., 75-1164
 Eglinton, G., 75-1074, 1186,
 1240, 1794
 Egorov, I. A., 75-2206
 Egorov-Tismenko, Yu. K.,
 75-3060
 Ehlin, P.-O., 75-2263, 2804
 Eichmann, R., 75-3389
 Eidam, J., 75-2237
 Eisbacher, G. H., 75-3651
 Eisma, D., 75-259
 Ekström, T. K., 75-2447,
 2450
 Elderfield, H., 75-3174, 3409,
 3794
 Ellenberger, F., 75-561
 Elliott, D. H., 75-2247, 3797
 Elliott, R. B., 75-658
 Ellis, A. J., 75-1014
 Ellison, S. P., Jr., 75-902,
 2069
 Ellwood, B. B., 75-744
 El-Mahdy, O. R., 75-974
 Elsass, Ph., 75-908
 Elsdon, R., 75-452, 702, 2469
 El-Sheemy, H. M., 75-90
 Elston, W. E., 75-3916
 Eltantawy, I. M., 75-811, 1822
 Embrey, P. G., 75-1388, 2519
 Embury, J. D., 75-3274
 Emeleus, C. H., 75-3654
 Emerson, R. W., 45-491
 Emiliani, F., 75-1292, 1441
 Emmermann, R., 75-2598,
 3694
 Empson, F. M., 75-3896
 Endo, K., 75-2309
 Endo, Y., 75-522, 1758, 1760
 Engelhardt, W. von, 75-435, 1279,
 1280
 Engell, J., 75-1340
 Engels, J. C., 75-2841
 England, R. N., 75-657
 Ensminger, A., 75-1186
 Eppelsheimer, D., 75-2110
 Eppler, W. F., 75-1078, 1101,
 1102, 3317
 Epstein, J. M., 75-1916
 Erämettä, O., 75-3466
 Erd, R. C., 75-547
 Erdman, J. A., 75-1133
 Eremin, N. I., 75-529, 2895
 Ericksen, G. E., 75-1389
 Ericsson, B., 75-2272
 Eriksson, K. A., 75-1557
 Erlenkeuser, H., 75-366
 Erlikh, E. N., 75-512, 2453
 Ernst, W. G., 75-2903 [66]
 Eross, B., 75-3909
 Ertl, R. F., 75-1677, 2757
 Ertl, S., 75-1677, 2757
 Es'kova, E. M., 75-1392, 1396,
 1398, 2525, 2526
 Eslinger, E. V., 75-2867, 3329
 Esquevin, J., 75-614
 Espiau, P., 75-2976
 Es-Said, S. I., 75-371
 Essene, E. J., 75-1393, 2523
 Essénov, Ch. E., 75-908
 Eugster, H. P., 75-2224, 3148
 Evans, B. W., 75-1611, 2700
 Evans, D., 75-3622
 Evans, D. L., 75-3164
 Evans, J. R., 75-222
 Evans, M. E., 75-3874
 Evans, P. R., 75-1426
 Evans, R., 75-2064, 3778
 Evans, T., 75-2735
 Evstigneeva, T. L., 75-2528
 Evans, T. R., 75-3866
 Evdokimov, M. D., 75-464
 Everell, M. D., 75-759
 Evrard, P., 75-908
 Evstigneeva, T. L., 75-558
 Ewart, A., 75-1455
 Ewing, M., 75-1516, 1525,
 1731, 2353, 2903 [12]
 Ewing, R. C., 75-3549
 Eysel, W., 75-3244
 Fabbri, B. P., 75-2207
 Fabbri, B., 75-1771, 1796,
 2252
 Facchinelli, A., 75-3142 (V.5)
 Faggiani, R., 75-1915
 Fahey, J. J., 75-1320
 Fähræus, L. E., 75-3772
 Fail, J. P., 75-3880
 Fainstein, G. S., 75-1879
 Fairhall, A. W., 75-1218
 Fakhry, A. A., 75-2337
 Fakhuri, M., 75-301
 Falkum, T., 75-2800
 Fallis, S. M., 75-140
 Fan, P.-F., 75-1876
 Fanale, F. P., 75-2383, 2779
 Fanfani, L., 75-3042
 Fang, C.-S., 75-2522
 Fang, J. H., 75-175
 Fang, Pu, 75-377
 Fanning, D. S., 75-796
 Farberov, A. I., 75-3178, 3735
 Farmer, V. C., 75-59
 Farn, A. E., 75-1098
 Farquharson, R. B., 75-1717,
 2839
 Faruqi, F. A., 75-3126, 3127
 Farvolden, R. N., 75-1213
 Faugères, J.-C., 75-1418
 Faugères, L., 75-3789
 Faure, A., 75-825
 Faure, G., 75-361, 2247, 2829
 Fauré, J., 75-3863
 Faure-Muret, A., 75-2815,
 2816
 Faust, G. T., 75-1320
 Fawcett, J. J., 75-277
 Faye, G. H., 75-3007, 3502
 Feder, G. L., 75-1133
 Fediuk, F., 75-2708, 3512
 Fediuková, E., 75-1629
 Fedoroff, M., 75-3142 (II.2)
 Fedorov, O. V., 75-3551
 Fedotov, A. F., 75-155, 2989
 Fedotov, S. A., 75-3736
 Feigin, A., 75-1829
 Felbeck, G. T., Jr., 75-1196
 Felder, F., 75-2327
 Felton, E. A., 75-3771
 Fenn, D. B., 75-114
 Feoktistov, G. D., 75-1341
 Féraud, J., 75-1648
 Ferguson, A. K., 75-3699
 Ferguson, C. C., 75-3457
 Ferguson, J., 75-1203, 2039
 Ferguson, R. B., 75-1887
 Fernall, T. H., 75-2889
 Ferrara, G., 75-1442, 3730
 Ferrario, A., 75-933
 Ferraris, G., 75-1378, 1926,
 3032
 Ferraz Pinto, A. C., 75-989

- Ferreira Pinto, A. F., 75-2562, 2563
 Ferreiro, E. A., 75-810
 Ferrell, R. E., Jr., 75-1740, 1741
 Ferretti, O., 75-926, 1545
 Fiala, F., 75-2603
 Fiala, J., 75-3473
 Fiddler, R. S., 75-2077
 Field, D., 75-658
 Field, J. E., 75-678
 Fields, J. M., Jr., 75-3243
 Figueiredo Gomes, C. S., 75-2419, 2442, 2458, 2510
 Filippova, T. P., 75-3337
 Finch, C. B., 75-1886
 Finkelman, R. B., 75-1772, 3523, 3553
 Finlayson, J. B., 75-2292
 Finnerty, T. A., 75-442
 Finney, J. J., 75-3009
 Finstad, K. G., 75-3361
 Firsov, L. V., 75-8, 9
 Firth, J. N. M., 75-1074
 Fischbeck, R., 75-1373
 Fischbuch, N. R., 75-3803
 Fischer, R. L., 75-2743
 Fischer, W., 75-857, 858, 2991
 Fischer, W. R., 75-3190
 Fisher, D. E., 75-1157
 Fisher, G. W., 75-3151
 Fisher, R. L., 75-2903 [3]
 Fisher, R. V., 75-585
 Fitch, F. J., 75-2798
 Fitzgerald, W. F., 75-1210
 Flaig, W., 75-2907 (1)
 Flanagan, F. J., 75-1222
 Fleet, A. J., 75-2260, 2648
 Fleet, M. E., 75-865, 1038, 1303, 2987
 Fleet, S. G., 75-3492
 Fleischer, M., 75-2214
 Fleischer, R. L., 75-1238
 Fleming, M. G., 75-901
 Flemming, N. C., 75-1515, 2538
 Flengas, S. N., 75-1798
 Fleuty, M. J., 75-1404
 Flight, W. R., 75-2888
 Flippovich, I. Z., 75-2824
 Flood, R. D., 75-2903 [14]
 Flood, R. H., 75-2625
 Florenskiy, P. V., 75-3635, 3864
 Flores, J. J., 75-1687
 Flower, M. F. J., 75-285, 2318
 Floyd, P. A., 75-3352, 3396
 Fodor, R. V., 75-3470
 Foglio, M. E., 75-2726
 Földvári-Vogl, M., 75-2331
 Foley, E., 75-917
 Folinsbee, R. E., 75-16
 Folger, D. W., 75-1553, 2888
 Folk, R. L., 75-3573, 3790
 Fominchev, E. N., 75-2096
 Fominnykh, V. G., 75-1994
 Fondeur, C., 75-2903 [22]
 Fontanella, J., 75-1747
 Fookes, P. G., 75-1844, 1847
 Foord, E. E., 75-551
 Forbes, A. W., 75-766
 Forbes, W. C., 75-471
 Ford, T. D., 75-2048
 Foreman, D. W., Jr., 75-3030
 Forgáč, J., 75-1163
 Fornés, V., 75-294
 Forster, A., 75-937, 998
 Förstner, U., 75-2271, 3374
 Fortier, G., 75-759
 Fortier, S., 75-1321
 Foscolos, A. E., 75-843
 Foster, H. L., 75-2626
 Foster, P. A., Jr., 75-3238
 Foster, P. K., 75-2160
 Foster, W. R., 75-2145, 3289, 3290
 Fouillac, C., 75-3154
 Fountain, J. A., 75-2780
 Fourcade, S., 75-3439
 Fournier, R. O., 75-398, 399, 401
 Fowler, G. A., 75-2903 [19]
 Fowler, N. R., 75-697
 Fox, J. S., 75-1597
 Fox, K. F., Jr., 75-2841
 Fox, W., 75-60
 Fraissard, J., 75-1881
 Franchini-Angela, M., 75-1378
 Francis, P. W., 75-1498, 1504
 Franco, R. R., 75-2906
 François, A., 75-908, 943
 Frank, W., 75-1609
 Frankis, E. J., 75-1049
 Frank-Kamenetsky, V. A., 75-541, 1893, 1903
 Franklin, F. A., 75-3914
 Frantesson, Ye[E.], V., 75-2256
 Frantz, J. D., 75-3148
 Franz, G., 75-291
 Franzini, M., 75-1337
 Fraser, A. G., 75-613
 Fredericks, A. D., 75-2226
 Fredriksson, I., 75-2273
 Frejvald, M., 75-1325
 French, B. M., 75-1281, 2680
 Frenkel, M., 75-1832
 Freund, F., 75-59, 1834
 Frew, N. M., 75-1257
 Frey, F. A., 75-286, 1160
 Frey, M., 75-661, 1609, 1616, 3511
 Freyer, H.-D., 75-1181
 Freytet, P., 75-1543
 Frick, C., 75-2613
 Fridelefsson, I. B., 75-1155
 Friedel, B., 75-1118
 Friedman, G. M., 75-321, 3382, 3404
 Friedman, I., 75-402, 1253
 Friedrich, G. H., 75-1383
 Friedrichsen, H., 75-1623
 Frigieri, P., 75-2890
 Fripiat, J. J., 75-84
 Frisck, T., 75-2414, 2835, 3649
 Frisillo, A. L., 75-2354
 Fritz, B., 75-2934, 2935
 Fritz, P., 75-2000
 Frolova, K. Ye[E.], 75-1347
 Frondel, C., 75-3592
 Frost, I. C., 75-2886
 Frush, C. O., 75-911
 Fryer, C. W., 75-1105
 Fu, T.-P., 75-3348
 Führtbauer, H., 75-614
 Fuerstenau, D. W., 75-1742
 Fuge, R., 75-3353
 Fujii, N., 75-2630
 Fujii, T., 75-2575
 Fujiki, Y., 75-3206
 Fujino, N., 75-50
 Fujiwara, S., 75-1793
 Fukunaga, O., 75-3198
 Fuller, B. D., 75-914
 Fuller, M., 75-2750
 Fulrath, R. M., 75-3287, 3279
 Funasaka, W., 75-1781, 1782
 Furnes, H., 75-3175
 Fursov, V. Z., 75-2320
 Furtado, A. F. A. S., 75-1853, 1992
 Furukawa, T., 75-108
 Futa, K., 75-1776
 Futergendler, S. I., 75-3530
 Fyfe, W. S., 75-61, 386, 677, 1420, 2584
 Fyffe, L. R., 75-740
 Fyles, J. T., 75-3116
 Gabrielyants, G. A., 75-1003
 Gabuda, S. P., 75-161, 874
 Gac, J.-Y., 75-1852
 Gadel, F., 75-2258
 Gaillard, C., 75-1529
 Gaines, R. V., 75-3593
 Galan, E., 75-3460
 Galanos, D. A., 75-1227
 Galbraith, F. W., 75-1685
 Galdeano, A., 75-2754
 Galimov, E. M., 75-1173, 1466
 Galitskii, V. Yu., 75-161, 874, 1910
 Gallagher, M. J., 75-930, 931, 1981
 Gallenne, B., 75-3629
 Galli, E., 75-1343, 1344
 Galli, P. E., 75-1379
 Gallitelli, P., 75-2391
 Gallo, F., 75-1495
 Gamlem, K., 75-990, 991
 Gamsonre, P. E., 75-3667
 Gandolfi, G., 75-2601
 Gandy, M. K., 75-3684
 Ganguli, D., 75-3241
 Ganguly, J., 75-2135
 Ganow, H., 75-2217
 Garcia Cacho, L. A., 75-1289, 3831
 Garcia Sanchez, A., 75-769
 Gard, J. A., 75-3480
 Garde, S. C., 75-2903 [46]
 Gardner, L. R., 75-1208
 Gardner, W. S., 75-406
 Garey, C. L., 75-103
 Garland, T. J., 75-2154
 Garmann, L. B., 75-3361
 Garn, P. D., 75-1836
 Garrard, R. A., 75-1539
 Garrels, R. M., 75-1063
 Garrett, D. E., 75-1176, 2065
 Gartner, S., Jr., 75-3770
 Gasparrini, E., 75-346, 3492, 3556
 Gasperin, M., 75-1262
 Gass, I. G., 75-1521
 Gast, P. W., 75-729, 2831
 Gast, R. G., 75-266
 Gastesi, P., 75-1518
 Gat, J. R., 75-1200
 Gaudette, H. E., 75-2888
 Gault, D. E., 75-1270
 Gaultier, J.-P., 75-2952
 Gaur, V. K., 75-1812
 Gauthier, J.-C., 75-3691
 Gavrikov, L. F., 75-3048
 Gavrilov, A. A., 75-2077, 1995
 Gavrilova, I. N., 75-2527
 Gaydukova, V. S., 75-3541
 Gazzara, C. P., 75-2468
 Gazzini, P., 75-1771
 Gazzoni, G., 75-3016
 Gebauer, D., 75-2
 Gebelein, C. D., 75-3577
 Gee, D. G., 75-2801
 Gee, R. D., 75-3645, 3673
 Geguzin, Ya. E., 75-546
 Gehnes, P., 75-3356
 Geisler, F. H., 75-1124
 Geiss, J., 75-3429
 Geissinger, H. D., 75-2846
 Gellatly, D. C., 75-3643
 Gendzwill, D. J., 75-3068
 Genkin, A. D., 75-558, 2528
 Genrich, D. A., 75-2926
 Genshaft, Yu. S., 75-3178
 Gentry, R. V., 75-1125, 1126
 Geory, E., 75-2448
 Gerasimova, Ye[E.], T., 75-33
 Gerling, E. K., 75-10
 German, L. L., 75-3738
 Gershoyg, Yu. G., 75-3840
 Geward, H., 75-2607
 Geyh, M. A., 75-1528
 Geys, J. F., 75-1540
 Geysant, J., 75-1410
 Ghalib, H. A. A., 75-3893
 Ghent, E. D., 75-3528
 Ghezzi, C., 75-2546, 2566
 Ghisler, M., 75-2655
 Ghosal, S. K., 75-1960
 Ghose, N. C., 75-2586, 2623
 Ghose, S., 75-144, 148, 180, 184, 471, 1894, 3284
 Ghosh, D., 75-2429
 Ghosh, D. B., 75-241
 Giammetti, F., 75-1495
 Giannetti, B., 75-3719
 Giardini, A. A., 75-510, 511
 Gibbs, G. V., 75-896, 1946, 3
 Gibson, R. I., 75-2515
 Gierth, E., 75-2477
 Giese, R. F., Jr., 75-156, 867, 869
 Giese, R. J., Jr., 75-1904
 Giesecking, J. E., 75-2907
 Gieskes, J. M., 75-3403
 Gilbert, F., 75-3653
 Gilbert, M. C., 75-3256
 Giles, D. L., 75-2024
 Gilinskaya, L. G., 75-3055
 Gilkes, R. J., 75-91, 3272
 Gill, E. M., 75-1728
 Gill, J. S., 75-13
 Gillespie, J. B., 75-805
 Gillot, B., 75-3200
 Gillot, J. E., 75-75
 Gillot, P. Y., 75-1704
 Gimenez, H., 75-3142 (IV.6)
 Ginsburg, R. N., 75-2903 [11]
 Giorgi, G., 75-2269
 Gipson, M., Jr., 75-3903
 Giraud, R., 75-3142 (II.9)
 Gittins, J., 75-3492, 3678
 Gittus, J. H., 75-3891
 Giuseppe, G., 75-3051
 Giusti, M., 75-2445
 Glaeser, R. M., 75-1884
 Glagoleva, M. A., 75-628
 Glasby, G. P., 75-1145, 1567, 3546
 Glass, G. E., 75-1201
 Glasser, F. P., 75-2177, 2178
 Glavatskikh, S. F., 75-2027
 Gladow, A. J. W., 75-2347
 Gleason, J. D., 75-402, 1253
 Glenn, G. R., 75-3163
 Glenn, J. L., 75-357
 Glenn, R. C., 75-137
 Glover, 75-3895
 Gluskoter, H. J., 75-3375
 Gobbett, D. J., 75-1805
 Göbel, F., 75-1369
 Goble, R. J., 75-2000
 Goddard, J., 75-2307
 Godfriaux, I., 75-3835
 Godovikov, A. A., 75-269, 270
 Goel, P. S., 75-1261
 Goff, F. E., 75-3531
 Gogte, B. S., 75-2745
 Gokhale, N. W., 75-1310, 1453, 2571

- Berg, E. D., 75-1551, 2296
 Berg, P. S., 75-3894
 Berry, R., 75-1873
 Bhabber, M., 75-2856
 Blich, S. S., 75-1721
 Bong, H. C., 75-3463
 Boring, D. C., 75-197
 Borth, J. R., 75-300, 2180
 Botein, J. I., 75-433
 Botein, J. T., 75-1265
 Brastikov, N. I., 75-152
 Bruev, V. S., 75-389, 2095
 Brucic, S., 75-3576
 Brucharova, T. Ya., 75-1500
 Brue, U., 75-3049
 Brucov, A. A., 75-260, 2297
 Brucalez, B. R., 75-2945
 Bruc, R. S., 75-1231
 Brucfellow, L., 75-2071
 Brucman, B. A., 75-2943
 Brucman, G. T., 75-197
 Brucwin, A. M., 75-2013, 1903 [57]
 Brucly, R. M., 75-2784
 Brucd, L. A., 75-928
 Brucy, R., 75-1254
 Brucsens, R. F., 75-1406
 Brucil, R., 75-1943
 Brucil, M., 75-329, 2624
 Brucenko, V. V., 75-326
 Brucen, E., 75-2375
 Brucki, J., 75-2070
 Bruchich, V. I., 75-3735
 Bruchkhov, S. S., 75-509
 Bruchnevskiy, D. I., 75-213
 Bruc W. A., 75-1256
 Brucelin, J. R., 75-3008
 Brucng, H. H., 75-997, 2049
 Brucne, N. N., 75-1310, 2571
 Bruc G. B., 75-223, 3092
 Brucardi, G., 75-876, 3464
 Brucfried, D., 75-2236
 Bruchgh, D. L., 75-1663
 Bruchid, R. W., 75-777
 Bruchinard, Y., 75-2809
 Bruchley, J. T., 75-146
 Brucett, G. J. S., 75-1227, 2023
 Brucindaraju, K., 75-41, 51, 411
 Brucinda Rajulu, B. V., 75-2570
 Brucivar, A. P., 75-1240
 Brucbezhev, A. L., 75-324, 1322
 Brucusov, B. P., 75-480, 2962
 Brucf, P. A., 75-3369
 Bruch, D. L., 75-754
 Brucham, C. M., 75-1307
 Brucham, E. K., 75-2139
 Brucham, J., 75-882, 1268
 Brucham, J. R., 75-3101
 Brucaccioli, C. M., 75-1801
 Brucnadchikova, B. G., 75-1877
 Brucnath, J. W., 75-3848
 Bruchnt, A. R., 75-2044
 Bruchnt, J. A., 75-3818
 Bruchnville, A., 75-900
 Brucpes, R. H., 75-2422
 Bruch, G., 75-2903 [24], 3880
 Bruchup, G., 75-1281
 Bruchereau, P., 75-1924
 Brucves, W. E., 75-1791
 Bruchy, C., 75-2043
 Bruchy, C. M., 75-3444
 Bruchy, D. A., 75-2316
 Bruchy, F., 75-3880
 Bruchaybeal, F. T., 75-2423
 Bruczini, M., 75-2440
 Bruchushnikov, B. N., 75-1910
 Bruchen, D. H., 75-1007, 1160, 1477, 2136, 2144, 2169, 2577, 3170
 Bruchen, G. R., 75-1454
 Green, H. W., II, 75-679
 Green, J. C., 75-2415
 Green, T. E., 75-753
 Green, T. H., 75-280
 Green, W., 75-3909
 Greene, R. S. B., 75-76
 Greenland, D. J., 75-2907 (2)
 Greenland, L. P., 75-40, 2236, 2871
 Greenslate, J., 75-2259
 Greenwood, H. J., 75-1478, 2075, 3155
 Greenwood, R., 75-3522
 Gregory, S., 75-391
 Gresens, R. L., 75-1596, 1645
 Grey, I. E., 75-1023
 Grieve, R. A. F., 75-277
 Griffen, D. T., 75-3005
 Griffin, J. J., 75-1551, 3794
 Griffin, R. A., 75-3235
 Griffin, W. L., 75-3516
 Griffith, W. P., 75-59
 Griffiths, J. C., 75-62
 Grigas, I. P., 75-3216
 Grigel, W., 75-1291
 Griggs, D. T., 75-3879
 Griggs, G. B., 75-1579, 3505
 Grigoriev, D., 75-2993
 Grigor'yev, N. A., 75-2228
 Grigor'yeva, L. F., 75-3264
 Grim, R. E., 75-1835
 Grimaud, D., 75-3406
 Grimes, N. W., 75-1919
 Grimley, P. H., 75-613
 Grison, D. L., 75-1248
 Groen, P., 75-2054
 Grögler, N., 75-3429
 Groneva, N. V., 75-558
 Gronow, J., 75-2819
 Gross, G., 75-1672
 Gross, S., 75-1715, 3013
 Grossman, L., 75-3443
 Grove, T. L., 75-2166
 Grover, J., 75-1010
 Groves, H. L., Jr., 75-2060
 Grozdanov, L., 75-1311
 Grubb, P. L. C., 75-3477
 Grundy, H. D., 75-1900, 1906
 Grünenfelder, M., 74-2
 Grünhagen, H., 75-833
 Grushkin, G. G., 75-209
 Grutzeck, M., 75-2149
 Grzybowski, J. M., 75-2083
 Guasparri, G., 75-2546, 2566
 Gübelin, E., 75-3313
 Gübelin, F. J., 75-1115
 Gude, A. J., 3rd., 75-507, 1588, 2460
 Guebelin, E. J., 75-1346
 Gueguen, Y., 75-3819
 Guest, R. N., 75-3121, 3122, 3123, 3124
 Guezou, J.-C., 75-561
 Guha, J. P., 75-3199
 Guidotti, C. V., 75-491
 Guillaume, R., 75-2903 [37]
 Guilloux, L., 75-908
 Guiseppetti, G., 75-3031
 Gulbrandsen, R. A., 75-2451
 Guletskaya, E. S., 75-1309, 2424
 Gulson, B. L., 75-1720
 Gunawardane, R. P., 75-2177
 Gundu Rao, C., 75-636
 Gunn, R. H., 75-841
 Gupta, J. P., 75-635
 Gupta, L. N., 75-441, 3659
 Gupta, R. K., 75-166
 Gurav, R. P., 75-516
 Gurov, Ye[E]. P., 75-1386, 1387
 Gurova, Ye[E]. P., 75-1386, 1387
 Gurvich, S. I., 75-3089
 Guseva, A. I., 75-1301
 Gustafson, W. I., 75-2137
 Guth, J.-L., 75-3299
 Gutmann, J. T., 75-495
 Gutnic, M., 75-1470
 Gutsche, H. W., 75-1432
 Güven, N., 75-77, 80, 154, 1828
 Guyot, J., 75-2975
 Gvirtzman, G., 75-3382
 Gwozdz, R., 75-1780
 Gy, P. M., 75-62
 Gyobu, A., 75-3033
 Haapala, I., 75-3539
 Haas, D. J., 75-2893
 Haas, H., 75-3276
 Hackett, J. P., Jr., 75-942
 Hacquebard, P. A., 75-2668
 Hadley, J. B., 75-3677
 Hadni, A., 75-59
 Hafner, S. S., 75-304, 880
 Haga, N., 75-873
 Hagenmuller, P., 75-3142 (II.1)
 Haget, Y., 75-3142 (II.7)
 Haggerty, S. E., 75-1239
 Hahn, Th., 75-3244
 Hails, J. R., 75-2672
 Hailwood, E. A., 75-3872
 Haji-Vassiliou, A., 75-518, 2983
 Hakenberg, M., 75-625
 Häkli, T. A., 75-3597
 Hale, R. C., 75-2002
 Hall, A., 75-562, 3344, 3688
 Hall, A. J., 75-1647
 Hall, B. A., 75-2558
 Hall, M. R., 75-3483
 Hall, P. R., 75-804
 Hall, S. R., 75-3034, 3041, 3211
 Hallam, M., 75-2200
 Hallbauer, D. K., 75-62, 1135
 Hallett, J. B., 75-3195
 Halls, H. C., 75-1670
 Halperin, J., 75-1125
 Hamil, M. M., 75-1894
 Hamilton, J. D., 75-62
 Hamilton, J. R., 75-3100
 Hamilton, L. H., 75-2035
 Hamlyn, P. R., 75-3542
 Hammarbäck, S., 75-2155
 Hammarstrom, J. G., 75-2868
 Hammond, D., 75-1162
 Hamza, A.-G., 75-397
 Hamza, M. S., 75-271
 Hanagodimath, R. S., 75-1633
 Hanauer, A., 75-1675
 Hancock, J. D., 75-3159
 Hanna, A. G., 75-1216
 Hanna, W. F., 75-3876
 Hansen, J., 75-1340
 Hanuš, V., 75-3473
 Haq, R., 75-3126
 Harada, J., 75-897
 Harada, K., 75-530
 Harada, M., 75-128
 Harakal, J. E., 75-741
 Hardcastle, J. H., 75-97
 Hardcastle, K. G., 75-1253
 Harder, H., 75-2942
 Harding, R. R., 75-2520, 2538
 Hardy, A., 75-1924
 Hardy, J. R., 75-3063
 Hargraves, R. B., 75-694, 2742
 Haridasan, T. M., 75-166
 Harlow, G. E., 75-167
 Harmon, R. S., 75-1198
 Harnett, P. R., 75-2852
 Harpaz, Y., 75-2312
 Harper, J. D., 75-640
 Harre, W., 75-821, 1706
 Harris, A., 75-1479
 Harris, A. L., 75-2067
 Harris, D. C., 75-3548, 3600
 Harris, D. P., 75-3094
 Harris, J. W., 75-1006
 Harris, N. B. W., 75-590, 1607
 Harris, P. G., 75-3690
 Harris, P. M., 75-197
 Harris, W. B., 75-992
 Harrison, I. B., 75-2316
 Harrison, J. E., 75-908
 Harrison, M. C., 75-1953
 Harrison, N. M., 75-1713
 Harrison, R. K., 75-1406, 1515, 2538
 Harrison, W. E., 75-3814
 Harry, W. T., 75-3654
 Hart, H. T., Jr., 75-1238
 Hart, J. R., 75-1152
 Hart, R. A., 75-1129
 Hart, S. R., 75-1137
 Harte, B., 75-58
 Hartley, A., 75-993
 Hartmann, W. K., 75-3915, 3918
 Harvey, B. I., 75-2543
 Harvey, P. J., 75-3195
 Harvey, P. K., 75-3457
 Hasegawa, M., 75-1774
 Haskin, L. A., 75-1068, 1069, 1161
 Haslam, H. W., 75-3373
 Hasnain, I., 75-2393
 Hassan, F., 75-497, 498
 Hassan, M. M. A., 75-397
 Hassenforder, B., 75-2816
 Hasu, H., 75-2157
 Hata, A., 75-1774
 Hata, Y., 75-1758, 1760
 Hatcher, R. D., Jr., 75-375
 Hatherton, T., 75-2903 [8]
 Hatibarua, J., 75-2730
 Hatten, C. W., 75-2903 [31]
 Haug, P., 75-407
 Haur, A., 75-3343
 Hausen, D. M., 75-913
 Hauser, H. M., 75-678
 Hawkes, J. R., 75-2520, 2538
 Hawkins, J. W., 75-2903 [36]
 Hawley, C. C., 75-956
 Hawthorne, F. C., 75-1900
 Hayakawa, K., 75-165, 2995
 Hayakawa, M., 75-3202
 Hayatsu, R., 75-3438
 Hayes, D. E., 75-2903 [41]
 Hayes, J. M., 75-2352
 Haynes, L., 75-930, 1981
 Hays, J. D., 75-2753, 2979, 2980
 Hazen, R. M., 75-1914, 2166
 Head, J. W., 75-2364
 Heald, M. T., 75-2653, 3809
 Healey, J. T., 75-777
 Healing, R. A., 75-197, 1953
 Hedberg, H. D., 75-722
 Hedlund, D. C., 75-989
 Heezen, B. C., 75-2903 [2]
 Heflik, W., 75-2459
 Heidecker, E. J., 75-2851
 Heidel, R. H., 75-779
 Heier, K. S., 75-2284, 3361
 Heiken, G. H., 75-1236
 Heimlich, R. A., 75-1724
 Hein, J. R., 75-1579, 3505
 Heinrich, E. W., 75-2409
 Hegde, K. T. M., 75-14
 Hejtmán, B., 75-2536

- Heckinian, R., 75-1522
 Heller-Kallai, L., 75-1858, 3013
 Hellmann, K.-N., 75-3694
 Hellner, E., 75-857, 858
 Helmstaedt, H., 75-983
 Helmy, A. K., 75-810
 Helwig, J., 75-1480
 Helz, G. R., 75-1212
 Hem, J. D., 75-296
 Hemingway, J. D., 75-1124
 Hemingway, J. E., 75-3783
 Hemley, J. J., 75-138
 Henderson, G., 75-2441
 Henderson, P., 75-3347
 Henderson, W. T., 75-1725
 Hendrickson, T. A., 75-2073
 Henin, S., 75-2162
 Henley, K. J., 75-3113
 Henley, S., 75-3392, 3687
 Henmi, K., 75-1840
 Hennig-Michaeli, Ch., 75-3183
 Henning, O., 75-59
 Henry, B., 75-1469, 3878
 Henry, J. T., Sr., 75-1956
 Herbert, H. K., 75-3705
 Herbert, J., 75-3142 (III.2)
 Herd, R. K., 75-3608, 3611
 Heritsch, H., 75-3833
 Herman, B. M., 75-3907
 Hernandez, D., 75-3788
 Hernandez, J., 75-3666
 Heropoulos, C., 75-527
 Héroux, Y., 75-1582
 Herrera, R., 75-1787
 Herrmann, H., 75-773
 Hervé, A., 75-3823, 3824
 Hervouet, M., 75-614
 Herz, N., 75-3117
 Herzog, G. F., 75-1272
 Hesp, W. R., 75-2213
 Hess, G., 75-236
 Hester, N. C., 75-3812
 Hétier, J.-M., 75-2970
 Hetman, J. S., 75-33, 37
 Heuer, A. H., 75-1920, 2344
 Heurtebise, M., 75-1787
 Hewins, R. H., 75-3469
 Hewitt, D. A., 75-3849, 3850
 Hey, M. H., 75-32, 1388, 2519, 3534
 Hibelink, P. A., 75-988
 Hickman, A. H., 75-3125
 Hieber, A. D., 75-1591
 Higashikuze, H., 75-1820, 1821
 Higgins, B. B., 75-3256
 Higgins, J. B., 75-2496
 Higgins, M. W., 75-1482
 Highley, D. E., 75-2047, 2949
 Hildebrand, F. A., 75-223, 1683
 Hildreth, R. E., 75-1725
 Hilgeman, T., 75-3436
 Hills, F. A., 75-742
 Hilly, M. J., 75-561
 Hinrichsen, Th., 75-3262, 3263
 Hinthorne, J. R., 75-1286, 1759
 Hinz, K., 75-2903 [13]
 Hirayama, K., 75-328
 Hirst, D. M., 75-235
 Hisano, K., 75-1783
 Hite, R. J., 75-2060, 2283, 2673
 Hla, UT. H., 75-3107
 Hladíková, J., 75-3343
 Hladky, G., 75-3232
 Ho, C. O., 75-3845
 Hobbs, B. E., 75-1432, 2165
 Hobson, D. M., 75-2544
 Hochleitner, R., 75-1305, 2756
 Höck, V., 75-1619
 Hockey, B. J., 75-2736
 Hockley, J. J., 75-3707
 Hodges, R. R., Jr., 75-2355
 Hodgson, C. J., 75-3112
 Hodgson, F. D. L., 75-2614
 Hodgson, G. W., 75-1020
 Hoernes, S., 75-1623
 Hoffman, G. L., 75-3413
 Hoffman, J. H., 75-2355
 Hoffman, P., 75-3577
 Hoffman, S. J., 75-1765
 Hoffman, V., 75-2502
 Hoffmann, C., 75-2076
 Hoffmann, Chr., 75-3171
 Hoffmann, T. M., 75-358
 Hofmann, A., 75-2086, 2087, 3153
 Hofmann, F., 75-2948
 Hofmann, H. J., 75-1585
 Hofmeister, E., 75-202
 Hogarth, D. D., 75-2759, 3465, 3594
 Hogg, C. S., 75-1816, 2153
 Hohenberg, C. M., 75-1237, 2318
 Höhm, J., 75-2738
 Holan, H., 75-761
 Holcombe, C. E., Jr., 75-3024
 Holdaway, M. J., 75-3276
 Holden, G. R., 75-2899
 Holdsworth, E., 75-436
 Ho Len Fat, A. G., 75-224
 Holland, C. G., 75-3326
 Holland, H. D., 75-2223
 Holland, J. G., 75-1127, 1241, 1519, 3399, 3759
 Holland, W. N., 75-1873
 Höller, H., 75-301
 Hollister, C. D., 75-2903 [14]
 Hollister, V. F., 75-2046
 Holloway, J. R., 75-248, 249, 3248
 Holm, R., 75-1689
 Holubec, J., 75-2710
 Honda, S., 75-505
 Honnorez, J., 75-3769, 3770
 Hood, W. C., 75-273
 Hoops, G. K., 75-3386
 Hopgood, A. M., 75-3613
 Hopkins, W. S., 75-1692
 Hopstock, D. M., 75-748
 Hopwood, T. P., 75-1432
 Horedt, G., 75-2371
 Hori, Y., 75-1839
 Horibe, Y., 75-2309
 Horn, E. E., 75-3214
 Horne, R. R., 75-2807, 3870
 Hornemann, U., 75-1062
 Horowitz, A., 75-1552, 2262
 Horton, A., 75-2657
 Hörz, F., 75-2366
 Hoschek, G., 75-1073
 Hoshino, S., 75-897
 Hosking, K. F. G., 75-1773
 Hossain, A., 75-2485
 Hostetler, P. B., 75-1047, 3275
 Hottin, A.-M., 75-2821
 Houareau, C., 75-614
 Houser, B. L., 75-3896
 Houtz, R. E., 75-2903 [48]
 Howard, K. A., 75-1283, 3422
 Howarth, R. J., 75-62, 2333
 Hower, J., 75-2867
 Howitz, R. C., 75-1429
 Hoyt, J. H., 75-2672
 Hron, F., 75-3881
 Hsia, L.-C., 75-3076
 Hsian, J.-K., 75-432
 Hsieh, K.-H., 75-515, 1449
 Hsü, K. J., 75-1180
 Hsu, L. C., 75-1379
 Hsu, P. H., 75-267
 Hsui, A., 75-2747
 Htay, U. T., 75-3107
 Huang, C., 75-1204
 Huang, C. K., 75-1234, 2499
 Huang, C.-S., 75-2522
 Huang, W. H., 75-802
 Huang, W.-L., 75-3258, 3267
 Hubbard, T. P., 75-730
 Hubble, G. D., 75-1874
 Huber, N. K., 75-1461, 1590
 Hubert, Y., 75-3299
 Hubicka-Ptasińska, M., 75-2470 3540
 Hüber, G., 75-1112
 Hubred, G. L., 75-1954
 Hückel, U., 75-378
 Huckenholz, H. G., 75-2138, 3247
 Hudson, G. A., 75-3121
 Hudson, J. D., 75-376
 Huggins, C. W., 75-753
 Huggins, F. E., 75-3002
 Hughes, D. J., 75-1402
 Hughes, M. D. A., 75-2543
 Hughes, M. J., 75-1567
 Huguenin, R. L., 75-2785
 Huhma, M., 75-3597
 Hulscher, W. S., 75-3027
 Hummel, F. A., 75-3205, 3236, 3304
 Humphries, D. J., 75-3431
 Hunter, D. R., 75-2616, 2617, 2618
 Hunziker, J. C., 75-3, 1609, 2435
 Hurlbut, C. S., Jr., 75-547
 Hurley, R. G., 75-1785
 Hurst, V. J., 75-511
 Husain, L., 75-1245
 Husband, W. H. W., 75-3131
 Hussain, M. S., 75-2971
 Hussain, S. M., 75-339, 3397
 Hussien, M., 75-240
 Hussein, S. I., 75-2677
 Hutcheon, I., 75-3162
 Hutchings, I. M., 75-678
 Hutchinson, J., 75-2818
 Hutchinson, R., 75-3690
 Hutchinson, R. W., 75-3069
 Hüttner, R., 75-1281
 Hutton, D. R., 75-1331
 Hutton, L. G., 75-316
 Hutton, S. M., 75-316
 Hwang, F. S. W., 75-1255
 Hwang, H. S., 75-979
 Hwang, L., 75-1920
 Hwang, W. H., 75-295
 Hybler, J., 75-3038, 3599
 Hyndman, R. D., 75-698
 Hynes, A., 75-610, 611
 Ichihara, S., 75-1841
 Ichio, T., 75-130
 Ichinose, N., 75-1775
 Iglesias, J. E., 75-111
 Iiyama, J. T., 75-290, 3142 (I.8)
 Iizumi, S., 75-329
 Ikan, R., 75-2276, 2277, 2278
 Ikawa, H., 75-293, 2152, 2157
 Iko, S., 75-2176
 Ikpeama, M. O. U., 75-361
 Ilavský, J., 75-939
 Ingamells, C. O., 75-1120
 Il'inskaya, M. N., 75-3816
 Ilyukhin, V. V., 75-159, 1910, 3006
 Inagaki, M., 75-2176, 3296
 Inamdar, D. D., 75-3870
 Ineson, P. R., 75-1702, 1703, 2048
 Inge, J. L., 75-3917
 Ingram, B., 75-470
 Inoue, K., 75-297
 Intiomale, M. M., 75-908
 Iqbal, S. H., 75-2051
 Ireland, H. A., 75-3774
 Irvine, T. N., 75-2572
 Irving, A. J., 75-258, 1243, 1399, 2117
 Irwin, W. P., 75-2903 [67]
 Isaacs, J. D., 75-1175, 2377
 Isaacs, B. L., 75-2903 [7]
 Isenhour, T. L., 75-1257
 Ishikawa, K., 75-62
 Ishikawa, Y., 75-1842, 1868
 Ishizaki, K., 75-1749
 Iskanderova, A. D., 75-10
 Isokangas, P., 75-3098
 Isphording, W. C., 75-115
 Issar, A., 75-1200
 Ito, E., 75-288
 Ito, J., 75-304, 873, 1906, 3592
 Ito, S., 75-3296
 Ito, T., 75-172, 856, 887, 3009
 Itoh, S., 75-523
 Itskson, G. V., 75-3485
 Ituki, K., 75-1778
 Ivanov, I. B., 75-1121
 Ivanov, I. V., 75-3410
 Ives, R. L., 75-716
 Ivimey-Cook, H. C., 75-621
 Iwai, S., 75-1923, 1940
 Iwasaki, I., 75-1757, 1761
 Iyer, R. A., 75-545
 Iyengar, L., 75-3860
 Iyer, G. V. A., 75-243, 465
 Izokh, E. P., 75-575
 Ja, J.-F., 75-3322
 Jacka, A. D., 75-3521
 Jacks, G., 75-2293
 Jackson, A. A., 75-2376
 Jackson, D. D., 75-3879
 Jackson, E. D., 75-1505
 Jackson, J. O., 75-1844
 Jackson, M. L., 75-95, 797, 2953, 3497, 3507
 Jackson, N. J., 75-3099, 3815
 Jacobs, M. B., 75-2979, 2980
 Jacobs, T., 75-3191
 Jacobsen, J. B. E., 75-226
 Jacoby, C. H., 75-3897
 Jaffe, H. W., 75-2417
 Jagadishwara Rao, R., 75-2322
 Jäger, E., 75-1609
 Jagodzinski, H., 75-866
 Jahn, B.-M., 75-4, 344
 Jain, A. K., 75-2664
 Jain, S. C., 75-217
 Jakeš, P., 75-382
 Jakes, P., 75-612
 Jakobsson, S. P., 75-1155
 Jambor, J. L., 75-537, 3340
 James, C. H., 75-194
 James, D. G., 75-1407
 James, H. L., 75-1969, 2014
 James, N. P., 75-2676, 2903 [11]
 James, O. B., 75-2346
 James, P. R., 75-2716
 Jamieson, B. G., 75-1472
 Janardan Rao, Y., 75-598, 2719
 Janardhanan, A. S., 75-454
 Jangi, B. L., 75-665
 Janke, N. C., 75-96
 Jansa, J., 75-2491, 2504
 Jansa, L. F., 75-3803

- M. G., 75-3782
 J., 75-1812
 te, D., 75-2816
 t, R., 75-1262
 on, D. A., 75-1895
 y, P. G., 75-2908
 s, H., 75-2773
 nko, W., 75-1921, 1929
 k, E., 75-3517
 as, R., 75-785, 2893
 J.-P., 75-3105
 a, M., 75-1340
 n, K., 75-215, 2227
 F. G., 75-2970
 e, D. Y., 75-3446
 ański, J., 75-1989, 2567
 a, F. W., 75-3132, 3135
 C., 75-2268
 H., 75-1526, 2254
 -W., 75-3240
 ms, E. A., 75-2185, 3321
 n, H. E., 75-1019
 u, O., 75-3366, 3367
 n, R., 75-644
 n, Z., 75-1395, 3142 (II.9)
 nnes, W., 75-2080, 2156
 a, R. B., 75-2275
 a, R. K., 75-2036
 son, A. A., 75-2390
 son, F. S., 75-2355
 son, J. N., 75-1175
 son, K. H., 75-855, 881
 son, K. S., 75-908
 son, L. J., 75-2920
 son, L. R., 75-3794
 son, P. W., 75-3119
 son, R. E., 75-1022
 son, R. G., 75-2884
 son, R. W., 75-1524,
 242
 son, T. V., 75-2383, 2779,
 434
 ston, D. H., 75-2351,
 787
 ston, R., 75-1468
 s, K., 75-2479
 asson, I. R., 75-1770
 es, D. G., 75-1023, 1024,
 1025, 3113
 es, D. Gwynn, 75-618
 es, D. L., 75-2903 [63]
 es, D. W., 75-3032
 es, H. E., 75-2039
 es, L. M., 75-737, 2247
 es, M. E., 75-3293
 es, M. J., 75-62
 es, M. P., 75-62
 es, P. C., 75-622
 ker, G. H., 75-3027
 eph, D., 75-727
 eph, E., 75-3142 (II.9)
 ephson, M., 75-1764
 ert, P., 75-2853
 ghin, N. C., 75-62
 anovic, S., 75-2490
 n, V. C., 75-1234, 1235
 A. J. T., 75-1240
 ge, C. E., 75-3389
 ek, K., 75-3473
 inak, J. J., 75-3235
 kiewicz, H., 75-625
 kowiakowa, M., 75-1851
 t, J., 75-552
 eau, T., 75-1470
 bata-Pendias, A., 75-116
 besh, M. L., 75-1314, 1315
 kafi, U., 75-2930
 gami, H., 75-329
 ger, P., 75-2494
 Kahle, C. F., 75-3575
 Kahma, A., 75-3079
 Kakitani, S., 75-292, 1871
 Kalafatcioğlu, A., 75-1421
 Kalb, G. W., 75-1042
 Kalbskopf, R., 75-889
 Kalil, E. K., 75-2856
 Kalinichenko, A. M., 75-1903
 Kalinin, D. V., 75-2095
 Kalinin, V. D., 75-758
 Kaljonen, T., 75-3394
 Kalmbach, J. H., 75-1481
 Kalocsai, G. I. Z., 75-3705
 Kalsbeek, F., 75-2655, 3607
 Kalyanam, M., 75-218
 Kamenskiy, I. L., 75-3414
 Kameswara Rao, K., 75-319
 Kameswari, S., 75-1026
 Kameyama, T., 75-2175
 Kamineni, D. C., 75-3467, 3486
 Kampf, A. R., 75-1399
 Kanaoka, S., 75-478
 Kanaris-Sotiriou, R., 75-1595
 Kanasewich, E. R., 75-3881
 Kanclic, E., 75-3160
 Kandiah, K., 75-775
 Kandyba, V. V., 75-2096
 Kaneko, J., 75-1768
 Kanisawa, S., 75-496
 Kanwar, R. C., 75-1812
 Kapezinskas, K., 75-654
 Kapitonova, T. A., 75-539
 Kaplan, I. R., 75-2276, 2277,
 2278, 2349
 Kaplun, Ye [E]. Ya., 75-3840
 Kapustin, Yu. L., 75-2524,
 2526, 2532
 Karickhoff, S. W., 75-81
 Karpenko, M. V., 75-447
 Karpenkov, A. M., 75-525
 Karpovich, R. P., 75-2671
 Karup-Møller, S., 75-1397,
 2443, 2497, 3571
 Karwowski, Ł., 75-331
 Kasaeva, T. A., 75-439
 Kasatov, B. K., 75-227
 Kasbekar, U. R., 75-781
 Kashpur, Ya. N., 75-3865
 Kastner, M., 75-380, 2231
 Katada, M., 75-522
 Kataeva, Z. T., 75-3465
 Katagas, C., 75-467
 Kato, E., 75-478
 Kato, I., 75-3734
 Kato, K., 75-2157
 Katsura, T., 75-254
 Katz, H.-R., 75-2903 [39]
 Kaufman, M. I., 75-1199
 Kautz, K., 75-3181
 Kavasmaneck, P. R., 75-1687
 Kawamura, T., 75-2995
 Kawano, M., 75-125, 1841
 Kay, J. G., 75-3646
 Kazak, A. P., 75-438
 Kazakova, M. E., 75-1396,
 2525, 3465, 3491
 Kazakova, M. Ye [E]. 75-520
 Kazama, T., 75-123
 Keeling, D. L., 75-1698
 Keen, C. E., 75-2903 [28]
 Keen, M. J., 75-2903 [28]
 Keilm, S. J., 75-3425
 Keil, K., 75-554, 1249, 2342,
 2345, 2348, 3424, 3470,
 3901
 Keith, S. B., 75-963
 Keith, T. E. C., 75-2626
 Kekeliya, S. A., 75-2714
 Kelepertsis, A., 75-3633
 Kel'kh, V. Y., 75-1355
 Keller, M., 75-3749
 Keller, P., 75-2513, 3142 (IV.7)
 Keller, W. D., 75-295
 Kellerman, S., 75-768
 Kelling, G., 75-620
 Kelly, W. C., 75-1034
 Kelly, W. R., 75-436
 Kemp, A. J., 75-3484
 Kemp, A. L. W., 75-2280
 Kempe, D. R. C., 75-1451,
 2260, 2401, 2647
 Keng, C.-M., 75-1735
 Kennan, P. S., 75-459, 1440
 Kennedy, G. C., 75-1045, 2135,
 3208
 Kennedy, M. J., 75-2696
 Kennett, J. P., 75-3762
 Kenolty, N., 75-2539
 Kent, P. E., 75-2903 [23]
 Kenyon, N. H., 75-608
 Kepezhinskas, V. V., 75-9, 349
 Kepka, M., 75-2918
 Keramidis, V. G., 75-2104
 Kerr, I. S., 75-877
 Kerr, J. W., 75-3650
 Kerrick, D. M., 75-250, 1646,
 3268
 Kerridge, J. F., 75-2349
 Kesler, S. E., 75-3095
 Kesson, S. E., 75-249
 Key, R. M., 75-316
 Khalid, R. A., 75-820
 Khan, A. A., 75-177, 188
 Khan, H. H., 75-241
 Khan, M. A., 75-194
 Khan, Q. H., 75-898
 Khandekar, P. V., 75-1918
 Khare, B. N., 75-3862, 3900
 Kharitonova, R. Sh., 75-3371
 Khar'kiv, A. D., 75-446
 Kharkwal, A. D., 75-2665
 Khel'vas, I. G., 75-209
 Khilnani, V. B., 75-632
 Khil'tova, V. Ya., 75-1191
 Khin, U. M. M., 75-3107
 Khitarov, N. I., 75-3142 (I.6)
 Khléstov, V. V., 75-654, 2905
 Kholief, M. M., 75-2455
 Kholodov, V. N., 75-320, 1561
 Kholopov, B. V., 75-1564
 Khomich, A. A., 75-367
 Khomyakov, A. P., 75-556,
 1392, 1394, 1396, 1398,
 2330, 2525, 2526
 Khoury, S. G., 75-674
 Khvostova, V. A., 75-519
 Khvostova, V. P., 75-1994
 Kidaka, Y., 75-1820
 Kidd, W. S. F., 75-2641
 Kidwell, A. L., 75-1147
 Kieffer, G., 75-3721
 Kieft, C., 75-2494
 Kihara, K., 75-3493
 Kikkert, J. H., 75-2892
 Killean, R. C. G., 75-690
 Killeen, P. G., 75-2284
 Killingley, J. S., 75-1285, 2396
 Kilvington, A. I., 75-1124
 Kim, K.-T., 75-1750
 Kim, O. J., 75-571
 Kim, S. J., 75-978
 Kimbara, K., 75-1863, 1864,
 1869
 Kimble, B. J., 75-1186, 1794
 Kimura, K., 75-312
 King, A. F., 75-3804
 King, C. A. M., 75-1812
 King, D. A., 75-1028
 King, G. A., 75-3158
 King, H. D., 75-1229, 2329
 King, H. E., 75-2147
 King, J. S., 75-2791
 Kinsland, G. L., 75-262
 Kipfer, A., 75-786, 1806
 Kirillov, V. P., 75-3212
 Kirilyuk, V. P., 75-664
 Kirkham, R. V., 75-908
 Kirnozov, F. F., 75-3327
 Kiselev, A. I., 75-1447
 Kishk, F. M., 75-90
 Kiss E., 75-2577
 Kissin, S. A., 75-1032
 Kistler, R. W., 75 2573
 Kita, D., 75-128, 133
 Kitagawa, Y., 75-122, 1353,
 1843
 Kitakaze, A., 75-54, 55, 526,
 531, 532, 533
 Kitching, R., 75-410
 Kitchrick, J. A., 75-106
 Kizaki, Y., 75-124
 Kiziyarov, G. N., 75-548
 Klapyta, Z., 75-809
 Klaus, W., 75-2058
 Klee, W. E., 75-1375, 1885
 Kleeman, A. W., 75-1380
 Klein, C., Jr., 75-2693
 Klein, L., 75-2170
 Klein, S., 75-169
 Klement, W., Jr., 75-3292
 Klement'yeva, L. V., 75-1351
 Klemm, D. D., 75-338, 3142
 (IV.9)
 Kleppa, O. J., 75-3253
 Klewe, B., 75-899
 Klingebiel, A., 75-614
 Klingspor, I., 75-2802
 Klitschenko, M. A., 75-506
 Klitzsch, E., 75-730
 Kloosterman, J. B., 75-233, 967
 Klosterman, M. J., 75-2589
 Knauer, E., 75-1628
 Knebel, H. J., 75-3802
 Knight, J. D., 75-1131
 Knipper, A. L., 75-3764
 Knittel, D., 75-3247
 Knopff, L., 75-3879
 Knudson, M. I., Jr., 75-82
 Knyazev, V. S., 75-3635, 3864
 Kobe, H. W., 75-2038
 Kocaba, R., 75-2872
 Koch, E., 75-857, 2991
 Kochetkov, B. V., 75-204
 Kocman, V., 75-3000
 Kodama, H., 75-112, 290, 819,
 843
 Koerner, R. M., 75-1219
 Koflyar, V. N., 75-3090
 Köhler, H., 75-1708
 Kohlstedt, D. L., 75-2413
 Kohyama, N., 75-2951
 Koide, M., 75-2296
 Koizumi, M., 75-2141, 2161
 Kokot, M. L., 75-1769
 Kolar, D., 75-3199
 Kolesnik, Yu. N., 75-1309,
 2424
 Koljonen, T., 75-3349, 3364,
 3365
 Kolmer, H., 75-3718
 Kolodny, Y., 75-1715
 Kolonin, G. R., 75-251
 Kolosov, A. S., 75-3587, 3588
 Kolotov, B. A., 75-2291
 Komatsu, M., 75-288
 Komkov, A. I., 75-3547
 Komornicki, T., 75-2918
 Komuro, H., 75-1778
 Konarski, E., 75-624
 Konda, T., 75-2415

- Kondrat'yev, A. V., 75-2825
 Konev, A. A., 75-1357
 Konishi, A., 75-3856
 Kon'kova, E. A., 75-2527
 Konnert, J. A., 75-2482
 Konno, H., 75-3265
 Kono, T., 75-1871
 Kononov, O. V., 75-3048
 Kononova, M. M., 75-2907 [8]
 Konta, J., 75-2394, 2469
 Konyukhov, A. I., 75-1860
 Kopeykin, V. A., 75-2290, 2978
 Kopp, O. C., 75-140
 Korekawa, M., 75-3513
 Korikovskiy, S. P., 75-448, 1632, 2713
 Kornilov, N. A., 75-3335
 Kornilovich, I. A., 75-227
 Kornprobst, J., 75-1316
 Korolev, N. V., 75-1354
 Korolev, V. A., 75-947
 Korolev, Yu. M., 75-3014
 Koroleva, N. N., 75-947, 3562
 Korzhinskii, D. S., 75-3152
 Kosals, Ya. A., 75-332
 Kosel, G. E., 75-2193
 Kosoi, A. L., 75-1893
 Köster, H. M., 75-835
 Koster van Groos, A. F., 75-2084, 2091, 3286, 3291
 Kostiner, E., 75-3058
 Kostov, I., 75-3509
 Kostyuk, V. P., 75-2620
 Kostyukova, I. G., 75-2727
 Kosztolani, Ch., 75-1228
 Kotanski, Z., 75-1414
 Kotelnikov, D. D., 75-120, 2974
 Kothari, B. K., 75-1261
 Koto, K., 75-145, 3033
 Kotov, N. V., 75-1066
 Kotov, P. A., 75-3120
 Kouns, C. W., 75-3427
 Koutek, J., 75-2020
 Kovalenker, V. A., 75-2528
 Kovalev, G. N., 75-1465
 Kovalev, P. V., 75-118
 Kovnurko, G. M., 75-3792
 Kowalczewski, Z., 75-1988
 Kowalczyk, G., 75-1319
 Kowalczyk, L. N., 75-2129
 Kowalski, W., 75-837
 Kowalski, W. M., 75-641
 Kozlov, Ye [E]. K., 75-3415
 Kozlowski, A., 75-331
 Kozlowski, K., 75-836
 Kraef, A., 75-2506
 Kraemer, T., 75-1167
 Kraftmakher, Ya. A., 75-1754
 Kramers, J. D., 75-1993
 Krasavina, T. N., 75-513
 Krause, H., 75-2477
 Krausz, K., 75-3269
 Kraut, F., 75-3452
 Kravchenko, N. S., 75-2212
 Kravchenko, S. M., 75-352, 353
 Kravchik, T. E., 75-405
 Krawitz, A., 75-2099
 Krebs, B., 75-1925
 Kreidler, E. R., 75-3203
 Kreidler, T. J., 75-3907
 Kresten, P., 75-2255, 2592
 Kretz, R., 75-2402, 3455
 Kreuzer, H., 75-1706, 1711, 1712
 Kridelbaugh, S., 75-2149
 Kridelbaugh, S. J., 75-3259
 Krinsley, D. H., 75-1535
 Kripandhi, A., 75-463
 Krishna Murti, G. S. R., 75-479, 1755, 2946
 Krishna Rao, J. S. R., 75-666, 2218
 Krishnaswami, S., 75-1146
 Kristek, J., 75-1004
 Krivitskaya, N. N., 75-706
 Krivokoneva, G. K., 75-303, 1027, 2105
 Krivosheyev, V. Ya., 75-395
 Kroes, R. L., 75-2780
 Krogh, T. E., 75-1720
 Kroll, H., 75-3142 (V.1)
 Kromer, H., 75-835, 1065
 Kröner, A., 75-1556, 3796
 Kropáček, J., 75-2502
 Krosch, N. J., 75-952
 Krouse, H. R., 75-1219
 Krüger, M. M., 75-2875
 Kruhl, J., 75-3826
 Krumbein, W. C., 75-1812
 Krumbein, W. E., 75-1528
 Krumhansl, J. L., 75-3549
 Krummenacher, D., 75-3
 Krushel'nitskaya, T. D., 75-686
 Kruta, T., 75-1807
 Kryowska-Iwaszkiewicz, M., 75-1547
 Ku, T.-L., 75-1570, 2307
 Kubler, B., 75-1614
 Kubovics, I., 75-2089
 Kudoh, Y., 75-3059
 Kudrass, H.-R., 75-1528
 Kudryavtsev, A. A., 75-63
 Kühn, R., 75-1180, 1206, 1566
 Kuijpers, E. P., 75-2024
 Kulakov, A. N., 75-464
 Kulig, M., 75-2480
 Kulish, Ye [E]. A., 75-2315
 Kulkarni, D. K., 75-1918
 Kulm, L. D., 75-2903 [19]
 Kumar, S., 75-139, 1562
 Kummer, R., 75-998
 Kunasz, I. A., 75-2061
 Kunugi, M., 75-3856
 Kunz, K., 75-1706
 Kunzendorf, H., 75-1340, 1780
 Kupfer, D. H., 75-3777
 Kuptsov, V. M., 75-1156
 Kurat, G., 75-1249, 2348, 3424, 3834
 Kurata, H., 75-443, 483, 1635
 Kurbiel, H., 75-693
 Kurimoto, R. K., 75-1273
 Kurittu, J., 75-163
 Kuroda, P. K., 75-2381
 Kurtz, W., 75-1290
 Kusevic, B., 75-62
 Kushi, R., 75-2093
 Kuskov, O. L., 75-3142 (I.6)
 Kutina, J., 75-2492
 Kutiyev, F. Sh., 75-512
 Kütüglü, A., 75-178
 Kutolin, V. A., 75-342, 2576
 Kutyeva, M. F., 75-3485
 Kuznetsov, A. G., 75-256
 Kuznetsov, V. V., 75-1446
 Kuznetsova, N. N., 75-548, 3583
 Kuznetsova, N. V., 75-3567
 Kvaček, M., 75-2489, 3085, 3560
 Kwak, T. A. P., 75-673
 Laajoki, K., 75-3488, 3821
 LaBerge, G. L., 75-1970
 Labotka, T. C., 75-151
 Lacam, A., 75-3302
 Lacconi, P., 75-3142 (IV.7)
 Lanchance, G. R., 75-17
 Lacour, A., 75-561
 Ladd, C. C., 75-2939
 Ladinski, B., 75-2969
 Ladle, G. H., 75-2847
 Laduron, D., 75-3456
 Laflamme, J. H. G., 75-3603, 3604, 3605
 Lafont, R., 75-831, 2960
 Lagache, M., 75-3301, 3303, 3142 (I.4)
 Lager, G. A., 75-896
 Lagerwey, A. A. F., 75-3537
 Lagovskaya, Ye [E]. A., 75-445
 Laguros, J. G., 75-139
 Lahiri, A., 75-2230
 Lai, D. Y. F., 75-2421
 La Iglesia, A., 75-2937, 3295, 3308, 3563
 Laitala, M., 75-3618
 Lajoie, J., 75-1582
 Lakatos, S., 75-2092
 Lakhno, T. A., 75-1341
 Lakin, H. W., 75-763
 Lakshman, S. V. J., 75-3050
 Lakshminarayanan, M. K., 75-2404
 Lakshminpathy, S., 75-2240
 Lal, S. S., 75-39
 Lallemant, M., 75-3150
 Lallement, J., 75-3142 (III.2)
 Lally, J. S., 75-2344
 Lalonde, J. P., 75-2324
 Lam, J., 75-3372
 Lambert, I. B., 75-2039
 Lambert, M. B., 75-3741
 Lambert, R. St. J., 75-1127, 3399
 Lamboy, M., 75-3506
 Lambrecht, L., 75-3787
 Lammerer, B., 75-338
 Lammelein, D., 75-2353
 Lancucki, C. J., 75-174
 Land, D. H., 75-2542
 Land, L. S., 75-2675, 3386
 Landa, E. R., 75-266
 Landis, C. A., 75-2903 [63]
 Lang, A. R., 75-2464, 2465, 2518
 Lang, J., 75-1541
 Langden, R. E., 75-1147
 Langer, A. M., 75-3398
 Langer, K., 75-1892, 2142
 Langham, E. J., 75-1652, 1653
 Langier-Kuźniarowa, A., 75-2918
 Langmuir, D., 75-1198, 3192
 Langseth, M. G., 75-3425
 Langston, M. J., 75-2543
 Lanning, F. C., 75-1591
 Lanphere, M. A., 75-1, 333
 Lapham, D. M., 75-2043
 Lapinskaya, T. A., 75-7
 Lappin, M. A., 75-2695
 Lappin, W. W., 75-783
 Laputina, I. P., 75-558, 2528
 Larese, R. E., 75-2653
 Larese, R. E., 75-3809
 Larimer, J. W., 75-424, 1271
 la Roche, H. de., 75-561
 Larpin, J.-P., 75-3193
 Larson, H. K., 75-2359
 Larson, L. T., 75-1358
 Larson, R. R., 75-3097
 Larsson, J. O., 75-2328
 Laskowski, J., 75-1961
 Latham, G., 75-2353
 Lathouwers, T. W., 75-3305
 Latish, V. T., 75-1808
 Laughlin, A. W., 75-2249
 Laughon, R. B., 75-1928
 Launay, J., 75-2903 [37]
 Lausch, J., 75-2286
 Lauzac, F., 75-925, 1142
 Laverne, D., 75-3406
 La Volpe, L., 75-1165, 3729
 Lavrent'ev, Yu. G., 75-1293, 2679, 3474
 Lavrov, A. S., 75-1548
 Lawless, J., 75-422
 Lawless, J. G., 75-2389
 Lawrence, J. L., 75-690
 Lawrence, J. R., 75-2231
 Lawrence, L. J., 75-1432
 Lawver, J. E., 75-748
 Layton, W., 75-3325
 Lazarenko, E. K., 75-1808
 Lazarev, A. N., 75-59
 Laz'ko, E. E., 75-437
 Laz'ko, Ye [E]. M., 75-664
 Lazorina, E. I., 75-298
 Le, V.-T., 75-3346
 Leadbetter, A. J., 75-872
 Leake, B. E., 75-454, 2690, 3484
 Learned, R. E., 75-1039
 Leary, J. J., 75-1257
 Le Bas, M. J., 75-1488
 Lebedev, L. M., 75-528, 977
 Lebedev, V. I., 75-852
 Lebedeva, S. I., 75-556, 1398, 3533
 Lebedeva, V. S., 75-1357
 Leblanc, G., 75-1666
 Le Borgne, E., 75-2754
 Lecar, M., 75-3914
 Leckebusch, R., 75-1384, 1385, 3476
 Le Dred, R., 75-3281, 3282
 Lee, C. W., 75-2433
 Lee, D. E., 75-2241
 Lee, N. J., 75-43
 Lee, S. Y., 75-3507
 Leeder, M. R., 75-2541
 Lee-Hu, C.-N., 75-1244
 Lees, G. J., 75-3357
 Lees, W. R., 75-3210
 Lefebvre, J. J., 75-908
 Lefèvre, C., 75-348, 3360
 Lefèvre, R., 75-2870, 3630
 Lefort, J.-P., 75-3828, 3842
 Le Fournier, J., 75-614
 Legedza, V. Ya., 75-210, 3212
 Lehmann, E. J., 75-2599
 Lehmann, G., 75-3519
 Lehtinen, M., 75-1323, 2476, 3601
 Leikine, M., 75-2438
 Leithner, H., 75-3316
 Leleu, M., 75-2112
 Le Mailloux, Y., 75-3096
 Le Maître, R. W., 75-1476, 234
 Lemoine, M., 75-1416
 Le Mouel, J.-L., 75-2754
 Lenthall, D. H., 75-2615
 Lenzen, G., 75-1076
 Leo, S. R., 75-180
 Leon, V. A. T., 75-927
 Leonard, J. D., 75-3391
 Leonard, R. A., 75-2919
 Leonardos, O. H., Jr., 75-677, 1420
 Leonardsen, E. S., 75-3582
 Leone, M., 75-1987
 Leoni, L., 75-47, 1337, 2445
 Lepp, H., 75-2909
 Leprevost, A., 75-2906
 Lepvriar, C., 75-1417
 Le Ribault, L., 75-1335
 Lesnov, F. P., 75-2580
 Lester, J. G., 75-310
 Leterrier, J., 75-755, 3659
 Létolle, R., 75-2258

- zey, J., 75-2903 [52]
 an, K., 75-370
 wein, F., 75-561, 2808,
 10
 hov, K. K., 75-3665
 enkov, O. A., 75-10
 lev, V. I., 75-1066
 E. M., 75-3222, 3231
 J., 75-62, 3421
 C., 75-1647, 3142 (IV.2)
 Y., 75-3405
 J. D., 75-3673
 S. R. S., 75-312, 3437
 S. V. A., 75-1162
 arie, P., 75-323
 eloup, A., 75-659
 hon, P. R., 75-2609
 e, F., 75-755
 hi-Tang, 75-1909
 P.-Z., 75-1055
 ., 75-2375
 .-H., 75-391, 2202
 icoat, R. T., 75-1105
 au, F., 75-1912
 ermann, R. C., 75-1012
 z, J., 75-1319
 t, J. F., 75-2844
 ond, W. Q., 75-3880
 H. C., 75-3289
 I. J., 75-2663, 3147
 K.-C., 75-475
 S. B., 75-3019
 S.-J., 75-2522
 C. J., 75-296
 berg, J. D., 75-805
 lbloom, J. T., 75-1946
 ie, M., 75-711
 erström-Lang, C. U., 75-
 996
 th, A., 75-1305, 2100
 sholm, R. C., 75-1772, 2860,
 3574
 lhuber, W., 75-2138
 dqvist, B., 75-2155, 3280
 dsay, J. F., 75-2369
 dsay, W. L., 75-2927
 dsey, D. A., 75-2217
 dsjö, O., 75-3584
 dsley, D. H., 75-1896, 2100,
 2147, 2687
 agenfelter, R. E., 75-2796,
 3902
 an, K. O., 75-3778
 ou, J. G., 75-1053, 3845
 piarski, I., 75-641
 oman, P. W., 75-402, 743, 962
 ppolt, H. J., 75-1281, 1707,
 2238, 3694
 pschutz, M. E., 75-1273
 rer, L., 75-1165, 3729
 sitsyn, A. E., 75-3538
 soivan, V. I., 75-1917
 ss, P. S., 75-1207
 tochleb, J., 75 2475
 tsarev, M. A., 75-1121
 tti H. W., 75-413, 3115
 tilejohn, A. L., 75-1478
 tvin, L. T., 75-2466
 u, C.-S., 75-3345
 u, C. Y., 75-1749
 u, J.-H., 75-515, 1449
 u, L.-G., 75-681, 685, 2140
 ivingstone, A., 75-700
 iyama, J. T., 75-3302
 obachev, A. N., 75-2733
 o. Bascio, A., 75-3724
 obo, J., 75-2051
 ock, B. E., 75-3670
 ofgren, G. E., 75-3144, 3173
 ogan, L. M., 75-26
 Lo Guidice, A., 75-2250
 Logvinenko, N. V., 75-86, 615,
 1530
 Loh, E., 75-1889
 Loida, A., 75-3263
 Lokken, J. E., 75-721
 Lombaard, S. L., 75-766
 Lombardo, B., 75-1606, 1608
 Long, D. G. F., 75-1584
 Long, J. V. P., 75-775
 Longstaffe, F. J., 75-1457
 Loomis, T. P., 75-3459
 Lopatin, N. V., 75-383
 Lopes Nunes, J. E., 75-2521
 Lopez Aguayo, F., 75-3460
 Lopez Ruiz, J., 75-1289, 2902,
 3831
 Lorenz, V., 75-3716
 Lorimer, G. W., 75-461, 1326,
 1328, 1882, 2444, 3480
 Lorin de la Grand-Maison, J.-C.,
 75-3447
 Louarn, N., 75-2869
 Loughnan, F. C., 75-1873
 Louis, J., 75-2903 [37]
 Løvborg, L., 75-1340
 Love, J. D., 75-961
 Love, L. G., 75-987
 Lovelock, J. E., 75-2313
 Loveridge, W. D., 75-2840
 Loving, J. F., 75-1362, 2347
 Low, P. F., 75-2930
 Lowdon, J. A., 75-18
 Lowell, J., 75-3248
 Lowenstam, H. A., 75-3384
 Lowenstein, P. L., 75-62
 Lowrie, W., 75-1661, 2753
 Lowry, D. C., 75-1430, 1431
 Lu, H.-C., 75-2032
 Lubchenko, I. Yu., 75-365
 Lucas, G., 75-1541
 Lucchetti, G., 75-1947
 Lucchini, F., 75-1442, 2564,
 2565
 Luckenbach, A. H., 75-3326
 Ludlow, C., 75-1753
 Ludwig, G., 75-821, 1168
 Ludwig, U., 75-3224
 Ludwig, W. J., 75-2903 [49]
 Luedke, R. G., 75-962
 Lukacs, J. M., 75-3245
 Lukashev, K. I., 75-367
 Lum, R. K. L., 75-3427
 Lumsden, D. N., 75-3807
 Lundström, I., 75-2803
 Lünel, T., 75-2550
 Luntz, A. J., 75-212
 Luongo, G., 75 3724, 3725
 Lutts, B. G., 75-2256
 Lydka, K., 75-565
 Lyng, S., 75-990, 991
 Lyons, W. B., 75-1210
 Lytkin, V. A., 75-1356
 Lyttleton, R. A., 75-2370
 Lyumbomilova, G. V., 75-2524
 Ma, C.-B., 75-275, 1051, 2132
 Maaløe, S., 75-2591
 McAnulty, W. N., Sr., 75-2050
 McArdle, P., 75-577
 McAtee, J. L., Jr., 75-82
 McBirney, A. R., 75-3715
 McBride, M. B., 75-107, 1819,
 2929
 McCarthy, J. H., 75-1125
 McCarthy, T. S., 75-2387
 Macaulay, I. D., 75-1194
 McCauley, J. S., 75-1046
 McCauley, J. W., 75-868, 2097
 Macciotta, G., 75-1496
 McClain, W. C., 75-3896
 McClennen, C. E., 75-2854
 McConnell, D., 75-182, 3030,
 3142 (IV.1)
 McConnell, R. K., 75-1256
 McConnell, R. L., 75-1592
 McCord, T. B., 75-3434
 McCready, R. G. L., 75-1128
 McCue, A. P., 75-3130
 McCulloch, H. W. A., 75-2049
 McCunn, H. J., 75-2120
 Macdermot, C. V., 75-3082
 MacDonald, J. G., 75-1439
 McDougall, I., 75-732
 McGetchin, T. R., 75-2364, 2634,
 2787
 McGill, G. E., 75-2365
 MacGregor, A., 75-2669
 MacGregor, I. D., 75-537, 1510
 McGregor, J. D., 75-3207
 McGregor, V. R., 75-734, 1601
 Macháček, V., 75-337
 Machado, F., 75-2639
 Machairas, G., 75-975
 McHardy, W. J., 75-839, 2943
 Machin, M. P., 75-2420
 McHugh, J. A., 75-1126
 MacIntosh, J. A., 75-981
 McIntyre, M. W., 75-767
 McIver, J. R., 75-2615
 McKay, D. S., 75-1236
 MacKallor, J. A., 75-2004
 McKee, T. R., 75-104, 2226
 McKelvey, B. C., 75-2648
 MacKenzie, F. T., 75-2222, 3229
 MacKenzie, K. J. D., 75-3004
 MacKenzie, W. S., 75-3142
 (IV.4), 3300
 Mackereth, F. J. H., 75-2749
 McKie, D., 75-1049
 McKirdy, D. M., 75-1132,
 1217
 Macklin, R. L., 75-1125
 McKnight, E. T., 75-2006
 McKyes, E., 75-1831
 McLaren, A. C., 75-2165
 McLaren, M. G., 75-3261
 McLaughlin, J. F., 75-1126
 McLean, E. O., 75-815
 McLean, W. J., 75-1928, 2531
 McLellan, A. G., 75-2172
 MacLeod, H. L., 75-3314
 MacLeod, N. S., 75-1459
 McMackin, C. E., 75-2191, 2194,
 2196, 2771
 McMahon, R. G. P., 75-2855
 McManus, J., 75-1536
 McMaster, R. L., 75-2854
 McMillan, N. J., 75-3804
 McMurry, E. W., 75-3874
 McMurtry, G. M., 75-1876
 McNeal, J. M., 75-1177
 McNeerney, J. J., 75-3417
 McNutt, R. H., 75-1158
 McQuillin, R., 75-617
 Madsen, B. M., 75-2674
 Maeda, K., 75-476, 3598
 Maeda, T., 75-2973
 Maes, A., 75-2932
 Magal, B. S., 75-781
 Magaritz, M., 75-2288, 2606
 Maglione, G., 75-3885
 Magraw, D., 75-3784
 Mahaffey, E. J., 75-1766
 Mahan, M., 75-1251
 Mahanta, P. C., 75-2730
 Mahon, W. A. J., 75-2292
 Mailhot, J., 75-561
 Mair, S. L., 75-3036
 Mäkelä, M., 75-3342
 Makharadze, A. I., 75-2714
 Makhlayev, L. V., 75-2398
 Makovicky, E., 75-1391, 1397
 Makovskaya, N. S., 75-446
 Maksimova, N. V., 75-159, 519,
 520
 Maksimovic, Z., 75-1824
 Maksumova, R. A., 75-3816
 Makushin, A. A., 75-2026
 Malden, P. J., 75-1816
 Malik, O. P., 75-3557
 Malinko, S. V., 75-52, 559,
 3583
 Malissa, H., Jr., 75-3440
 Mal'kov, B. A., 75-2581
 Malkova, L. A., 75-1893
 Mall, A. P., 75-2167
 Mallard, D. J., 75-1656
 Mallett, R. C., 75-768, 2872
 Mallik, T. K., 75-3800, 3801
 Malone, P. G., 75-1202
 Mamontov, B. V., 75-947
 Maluski, H., 75-2817
 Malyyev, N. Ch., 75-3635
 Mamuro, T., 75-2317
 Mamy, J., 75-2952
 Mamyrin, B. A., 75-3414
 Mandarino, J. A., 75-3565,
 3602
 Manheim, F. T., 75-801, 2294
 Mani, V. V. S., 75-1812
 Mann, W. R., 75-3810
 Manners, G., 75-195
 Manning, P. G., 75-3003, 3008
 Mano, J., 75-1009
 Manowitz, B., 75-1220
 Mantienne, J., 75-1395
 Manus, R. W., 75-3773
 Mao, H.-K., 75-262
 Mapes, J. E., 75-176
 Marçal, L., 75-3692
 Marchand, J., 75-3629
 Marchant, J. W., 75-2336
 Marchenko, Ye[E]. Ya., 75-1387
 Marchese, B., 75-3249
 Marchig, V., 75-750
 Marcus, A. H., 75-2200
 Marfunin, A. S., 75-490, 3142
 (II.5)
 Margolis, S. V., 75-1535
 Margulis, L., 75-2313
 Marhinin, E. K., 75-3737
 Marin, Yu. B., 75-489
 Marineau, F., 75-2811
 Marinenko, J. W., 75-1389,
 1762
 Mariner, T. H., 75-1113
 Marinov, B. N., 75-1195
 Marinov, N. A., 75-1195
 Marjoribanks, R. W., 75-733
 Mark, R. K., 75-1244
 Markov, M. S., 75-3764
 Markov, V. A., 75-1559
 Markovskiy, B. A., 75-351
 Marland, G., 75-2119
 Marnier, G., 75-3142 (II.4)
 Marocco, R., 75-3852
 Marques, M. M., 75-1992
 Marsh, B. D., 75-607
 Marsh, J. S., 75-3481
 Marshall, J. H., Jr., 75-701
 Marshall, G., 75-1897
 Marsicano, F., 75-928
 Martignole, J., 75-601
 Martin, F. S., 75-1687
 Martin, H., 75-3419
 Martin, R., 75-1334
 Martin, R. F., 75-3142 (V.3)
 Martin, R. G., Jr., 75-2903 [51]
 Martin, R. T., 75-2939

- Martin-Caballero, J. L., 75-2937
 Martinez, J. D., 75-3781
 Martini, I. P., 75-2861
 Martini, J., 75-1614
 Martini, J. E. J., 75-3798
 Martin Pozas, J. M., 75-3031
 Martin-Rubi, J. A., 75-110
 Martin-Vivaldi, J. L., 75-2937, 3295, 3308, 3460
 Marumo, F., 75-276, 1923, 1940
 Maryyev, N. Ch., 75-3864
 Masaitis, V. L., 75-434
 Mascle, J., 75-2903 [20, 22]
 Mascolo, G., 75-3249
 Maslen, E. N., 75-1944
 Mason, B., 75-2384, 3478
 Mason, B. H., 75-1320
 Massaad, M., 75-2487
 Masse, R., 75-3046
 Massion, P. J., 75-2091
 Masuda, A., 75-1526, 2254, 3442
 Masuda, Y., 75-327
 Masurenkov, Yu. P., 75-1465
 Mateen, A., 75-142
 Matějovská, O., 75-2709
 Mather, J. D., 75-2316
 Mathey, B., 75-1582
 Mathieu, R., 75-1541
 Mathison, C. I., 75-1298
 Matias, M.-J., 75-2644
 Matrosov, I. I., 75-211, 2998
 Matson, D. L., 75-2779
 Matsuda, T., 75-1840
 Matsui, J., 75-1872
 Matsui, M., 75-1821
 Matsui, T., 75-132
 Matsui, Y., 75-3010, 3142 (I.5)
 Matsumoto, E., 75-2295
 Matsumoto, T., 75-2399, 3493
 Matter, A., 75-2857
 Matteudi, G., 75-1751
 Matthews, S., 75-1625
 Matthews, D. H., 75-1514
 Matthews, R. K., 75-2261, 2677
 Matthias, I. G., 75-1639
 Matthies, H., 75-1745
 Mattson, P. H., 75-3720
 Matyash, I. V., 75-1903
 Maugh, T. H., II., 75-1880
 Maurel, C., 75-1035, 3142 (IV.3)
 Maury, R., 75-2632
 Maury, R. C., 75-2596
 Max, M. D., 75-2808, 3624, 3625
 Maxwell, J. C., 75-2903 [62]
 Maxwell, J. R., 75-1186, 1240, 1794
 May, F., 75-2068
 Mayer, L. M., 75-2867
 Mayhew, M. A., 75-2903 [30]
 Mazdiyasi, K. S., 75-3022
 Mazeran, R., 75-1648, 3075
 Mazor, E., 75-2312
 Mazzella, A., 75-1657
 Mboma-Muyolo, F., 75-3142 (IV.8)
 Meads, R. E., 75-1816, 2153
 Meagher, E. P., 75-1730, 3001
 Medenbach, O., 75-1090, 3311, 3479
 Medushevskaya, I. A., 75-3636
 Mégard, F., 75-3852
 Megaw, H. D., 75-3029
 Megumi, K., 75-2317
 Mehnert, H. H., 75-743, 2828
 Mehnert, K. R., 75-1016, 2600
 Mehrotra, D. K., 75-1812
 Mehrotra, G. M., 75-2098
 Mehta, P. K., 75-3223
 Mehta, S., 75-2123
 Mei, L., 75-1762
 Meinschein, W. G., 75-2352
 Meisl, S., 75-969
 Melchior Larsen, L., 75-2243
 Melent'yev, B. N., 75-252, 1071
 Melent'yev, G. B., 75-539
 Melguen, M., 75-1555
 Mel'nikov, O. K., 75-2733
 Mel'nikov, V. S., 75-1382
 Melson, W. G., 75-3758
 Melton, C. E., 75-510, 511
 Men', A. A., 75-2725
 Menaker, G. I., 75-946
 Menchetti, S., 75-885, 3062
 Mendes, F., 75-1705
 Menendez, R., 75-614
 Menendez del Valle, F., 75-3563
 Menisey, M. Y., 75-1711, 1712
 Menschel, G., 75-2118
 Men'shikov, Yu. P., 75-1394
 Menzel, D. W., 75-406
 Menzies, M., 75-609
 Mercer, I., 75-2914
 Merefield, J. R., 75-2334
 Mereiter, K., 75-3045
 Mergoil-Daniel, J., 75-3514
 Merh, S. S., 75-1812
 Mering, J., 75-1825, 1905
 Mer'kov, A. N., 75-1394, 1398
 Merkulova, K. I., 75-2830
 Merlino, S., 75-150, 160, 875, 1899
 Merrill, K. M., 75-2373
 Merrill, L., 75-262, 3047
 Merriman, R. J., 75-2520, 2538
 Merzylakov, G. A., 75-2066
 Meshchankina, V. I., 75-557
 Metz, W. D., 75-1511
 Meurisse, M., 75-3785
 Meville, G., 75-41
 Meyer, C. E., 75-1247
 Meyer, G. W., 75-266
 Meyer, H. O. A., 75-2629
 Meyer, W. T., 75-1226
 Meyerhoff, A. A., 75-2903 [31]
 Meyers, G., 75-2764
 Meyers, P. A., 75-372, 1215
 Mezzadri, G., 75-1492
 Mezzetti, R., 75-2434
 Miall, A. D., 75-3324
 Michard, G., 75-3154, 3406, 3408
 Michel, J.-P., 75-3775
 Michie, U. McL., 75-1981
 Michot, J., 75-561
 Middlehurst, B. M., 75-2354
 Middleton, R. M., 75-2468
 Mifsud, A., 75-1825
 Mikhailova, V. A., 75-525
 Mikhaylov, A. S., 75-2290
 Mikjaylov, B. M., 75-214
 Mikhaylov, D. A., 75-10
 Miłaczewski, L., 75-1851
 Milet'skiy, B. Ye[E.], 75-205
 Miller, B. E., 75-3528
 Miller, C., 75-1612
 Miller, D. K., 75-231, 2381
 Miller, D. S., 75-321, 2092, 3382
 Miller, J. A., 75-1514, 2798
 Miller, R. H., 75-2907 (6)
 Miller, R. J., 75-814
 Miller, T. P., 75-3412
 Millhollen, G. L., 75-299, 1067
 Milligan, G. C., 75-2850
 Mills, K. J., 75-1637
 Milnes, A. R., 75-1380, 1638
 Mil'shtein, B. G., 75-3854
 Milton, C., 75-470, 544, 3553
 Milton, R. M., 75-1125
 Minato, H., 75-121, 502, 649
 Minette, J. W., 75-714
 Ming, L.-C., 75-3246
 Minkin, J. A., 75-3428
 Miranda, A. M., 75-2644
 Mironenko, O. A., 75-2956
 Misař, Z., 75-787, 2602, 3616
 Misch, P., 75-3482
 Mishra, V. P., 75-1812
 Misra, K. C., 75-1038
 Misra, R. C., 75-1812, 2718
 Mitchell, A. H. G., 75-199, 904
 Mitchell, J. G., 75-1697, 1702, 1703, 1727
 Mitchell, J. K., 75-97
 Mitchell, P. W. D., 75-3184
 Mitchell, T. E., 75-1920
 Mitenkov, G. A., 75-525
 Mitler, H. E., 75-3328
 Mitra, S., 75-633
 Mitsuhashi, T., 75-3206
 Miura, K., 75-2903 [32]
 Miyake, G. T., 75-433, 1265
 Miyake, S., 75-165, 2995
 Miyara, E., 75-29
 Miyashiro, A., 75-1516, 1525, 2643
 Miyazaki, A., 75-318
 Miyokawa, K., 75-530
 Mizokacka, K., 75-693
 Modreski, P. J., 75-3270, 3271
 Modry, S., 75-3857
 Moenke, H. H. W., 75-59
 Moh, G. H., 75-1031
 Mohajer-Ashjai, A., 75-3875
 Mohan, S., 75-403
 Mohanty, B. K., 75-668
 Mohsin, S. I., 75-2705
 Moine, B., 75-561
 Moineureau, J., 75-2963
 Molchanov, V. I., 75-260, 2297
 Moll, W. F., Jr., 75-109
 Möller, P., 75-1374, 2121, 2286
 Molnia, B. F., 75-2885
 Molton, P. M., 75-2379
 Molyneux, L., 75-2749
 Monchoux, P., 75-3692
 Monjoie, A., 75-3787
 Monsour, S., 75-3222
 Montadert, L., 75-2903 [22, 24, 37, 52], 3880
 Montagna, S., 75-3725
 Montel, G., 75-3053, 3141
 Montgomery, A., 75-1719, 2772
 Montigny, T., 75-3765
 Monyushko, A. M., 75-1859
 Moorbatch, S., 75-725, 734, 735, 1719
 Moore, C. A., 75-98
 Moore, C. B., 75-436, 1125, 1277
 Moore, D. G., 75-2903 [45]
 Moore, J. C., 75-2903 [60]
 Moore, J. McM., 75-1986, 3088
 Moore, L. P., 75-3438
 Moore, M., 75-2464, 2465
 Moore, P. B., 75-181, 300, 884, 893-895, 1377, 1399, 1945, 3056
 Moore, W. J., 75-1486
 Moore, W. S., 75-1146
 Moorlock, B. S. P., 75-2289
 Morandi, N., 75-1837, 2427, 3498
 Morawski, W., 75-203
 Mordojovich, C., 75-2903 [42]
 Moreau, H., 75-3661
 Moreau, J., 75-908
 Morey, G. B., 75-2221
 Morey, G. W., 75-401
 Morgan, B. A., 75-2715
 Morgan, C. J., 75-1237, 2318
 Morgan, D. A. O., 75-197
 Morgan, W. R., 75-600
 Mori, T., 75-3142 (I.2)
 Morikawa, H., 75-1923
 Morimoto, N., 75-145, 2131, 3010, 3033
 Morisawa, M., 75-1812
 Morita, H., 75-2274
 Moropol'skaya, G. L., 75-3371
 Morris, B. J., 75-2037
 Morris, D. A., 75-640
 Morris, P., 75-3868, 3869, 3871
 Morris, R. V., 75-1068, 1069
 Morrissey, C. J., 75-1983
 Morrison, D., 75-2778
 Morrison, H. F., 75-1657
 Morse, J. W., 75-3227
 Morteau, G., 75-1374, 1413, 2286, 2699
 Morten, L., 75-1442, 2437, 2565
 Mortier, W. J., 75-1827
 Mortland, M. M., 74-78, 107, 114, 813, 1819, 2929
 Morton, R. A., 75-1875
 Morton, R. D., 75-2000
 Mosely, P. N., 75-3331
 Mosier, E. L., 75-2329, 3550
 Moskaleva, S. V., 75-642
 Mosser, Ch., 75-803, 1852
 Mosson, P., 75-561
 Mottana, A., 75-1054, 2701
 Mouglin, G., 75-3193
 Mounteney, S. N., 75-2910
 Mountjoy, W., 75-2217
 Mráz, J., 75-2394
 Mrose, M. E., 75-1389
 Muan, A., 75-1022, 3161
 Mücke, A., 75-2025
 Muecke, G. K., 75-698, 1445
 Muehle, G., 75-714, 2770
 Muehlenbachs, K., 75-347
 Mueller, R. F., 75-3167
 Muenow, D. W., 75-1285, 2396
 Mugniot, J. F., 75-2903 [52]
 Muir, M. D., 75-2035
 Mukherjee, R. N., 75-1960
 Mukherjee, A. C., 75-1581
 Mukherjee, A. D., 75-229
 Mukherji, S., 75-2681
 Mukhutdinova, M. K., 75-3371
 Mulgrew, J. R., 75-908
 Mullen, D. J. E., 75-171, 890, 1936, 1937
 Muller, O., 75-64, 1373, 2271, 2637, 3374
 Muller, J. E., 75-2557, 2840
 Müller, P., 75-1706, 2535
 Müller-Sohnius, D., 75-1708
 Mulligan, J. J., 75-957
 Mullineaux, D. R., 75-3742
 Mumme, W. G., 75-3039
 Munkelwitz, H. R., 75-1220
 Münnich, K. O., 75-2311
 Munshi, R. L., 75-241
 Munson, R. A., 75-1650
 Münther, V., 75-3656
 Murad, E., 75-3662
 Murakami, N., 75-492
 Muraki, S., 75-1781
 Murali, A. V., 75-1790
 Murat, M., 75-3218
 Murdmaa, I. O., 75-2646
 Muroi, I., 75-3734
 Murozumi, M., 75-1788

- J. M., 75-34, 35
 J. W., 75-1134
 P. J., 75-76
 P. R., 75-954
 E. J., 75-3564
 H. H., 75-102
 J. W., 75-3189
 R. C., 75-2678
 D. S. N., 75-666
 I. S. N., 75-647
 V. R., 75-344
 M. S., 75-488
 A. E., 75-730
 T., 75-3617
 S. J., 75-1601, 3607,
 3610, 3614
 S. I., 75-2027
 A., 75-2312
 V. A., 75-878
 C. W., 75-5, 2842
 C., 75-2473
 H. R., 75-2570
 K., 75-818
 T., 75-1778
 K., 75-530
 S., 75-254
 H., 75-817, 1869
 T., 75-2254
 H. E., 75-3142 (V.1)
 S. V. N., 75-581
 M. K., 75-12
 K. K., 75-12, 1812
 D. L., 75-3049
 P. P., 75-39
 S. V. N., 75-3860
 S., 75-2175, 2176, 3296
 Y., 75-1758, 1760
 Y., 75-3010
 N., 75-431
 S., 75-1788
 Y., 75-2093, 2353
 Y., 75-29
 R., 75-128
 B. F., 75-575
 M. C., 75-2427
 G., 75-3724
 S. M., 75-339, 2555
 S. M., 75-3397
 H., 75-2555, 2903 [46]
 V., 75-3843
 S., 75-3760
 A. H., 75-1952
 V. V., 75-3178
 M. I., 75-1789
 D. B., 75-684
 J. T., 75-986, 1232, 3070
 V. E., 75-137
 K., 75-1056
 Y., 75-1858, 3894
 P., 75-1342, 1704
 J. J., 75-1162, 1698
 V. B., 75-3861
 D. F., 75-3427
 E., 75-2688
 A., 75-3187, 3194,
 3248, 3253
 R., 75-1297
 B. S., 75-1293
 V. K., 75-217, 2392,
 2411
 D., 75-2910
 E., 75-847
 T. L., 75-3851
 A. P., 75-1394
 J. F. W., 75-3747
 T., 75-503, 505
 T. F., 75-438
 C. E., 75-2148, 2342,
 3168
 A. M. R., 75-1136, 1598
 I. Ya., 75-265
 B. W., 75-2984
 R. A., 75-1164
 D., 75-591, 2287
 S. N., 75-269, 270
 Y. P., 75-1564
 S. G., 75-3370
 G. J., 75-2878
 A. C' D., 75-818
 D., 75-1980
 R. E., 75-683, 854,
 868
 A. R., 75-2853
 G. W. A., 75-1124
 M. J., 75-62
 R. C., 75-300, 2180
 E. P., 75-2372
 G. Ye [E.], 75-1192
 I. A., 75-945
 A. C., 75-1211
 C. T., 75-515, 1449, 1998,
 3566
 W., 75-1277
 G. D., 75-62
 I. A., 75-257, 1734
 P. S., 75-3274, 3278,
 3279
 E. H., 75-2439
 E. F. P., 75-3331
 A., 75-699, 1412
 D. J., 75-1763
 M., 75-2070
 G., 75-1678
 S., 75-3147
 H. J., 75-3136
 K., 75-3466
 G., 75-2234
 A., 75-857, 2990
 E., 75-938, 1609
 L., 75-3466
 N. M., 75-2321
 N. N., 75-350
 V. F., 75-1214
 D., 75-2753
 D., 75-1162
 S., 75-327
 Y., 75-302, 1839
 T., 75-1862, 1865,
 1868
 H., 75-2141
 O., 75-3142 (I.5)
 J., 75-2021
 H.-U., 75-1326, 1328
 E., 75-1125
 J. A., 75-2005
 W. J., 75-3385
 J., 75-2146
 M., 75-3436, 3909,
 3911
 W., 75-1689
 V. I., 75-439
 B. E., 75-1503, 1507
 M., 75-3717
 K., 75-134, 2986
 N. A., 75-1041
 K. E., 75-2557
 D. L., 75-1509
 S. A., 75-1179
 A. J. G., 75-234
 N. N., 75-908
 F., 75-2489, 2491, 2504,
 3560
 B., 75-1213
 M. I., 75-205
 W., 75-171, 172, 887,
 888, 890, 1934, 1936, 1938,
 2500, 3037, 3040
 G. A., 75-1736
 G. S., 75-3772
 T., 75-328
 J. O., 75-274, 1376,
 2124
 M., 75-1784
 P. D., 75-728, 3430
 A., 75-3042
 M. J. C., 75-201
 Y. Y., 75-3471
 U. K., 75-3107
 E., 75-1663, 3882
 D. N., 75-3107
 U. K. M., 75-3107
 J. M., 75-2907 (2)
 M., 75-2684, 3142 (I.2)
 V. R., 75-1251
 W., 75-788
 A., 75-369
 A. V., 75-206
 J. D., 75-402
 P. J., 75-3685
 S., 75-650
 J. R., 75-915
 B., 75-3558
 C. R., 75-1696
 G. S., 75-826, 2435, 3506
 M. J., 75-308,
 2183
 I. S., 75-1978, 2494
 T. W., 75-1283
 R., 75-3846
 L., 75-2547
 J. A., 75-2965
 M. J., 75-1069, 1153,
 1250, 3165, 3166, 3431
 H., 75-148
 M., 75-888, 3037
 H., 75-1148
 W., 75-1467
 Y.-H., 75-2995
 K., 75-1575, 1862,
 1867, 2436
 P., 75-3488, 3539
 Y., 75-2399
 K., 75-1923
 H., 75-127
 F. P., 75-148, 3284
 T., 75-1784
 Y., 75-650
 M., 75-1628, 2712
 S., 75-297
 W., 75-2593
 S., 75-808
 M., 75-3273
 J. A., 75-3887
 J., 75-2903 [7]
 J.-L., 75-2903 [53]
 J. P., 75-100
 A., 75-105
 C. E., 75-1196
 I., 75-1941, 1942
 A., 75-493, 3142 (II.6)
 C. R., 75-2982
 P., 75-918
 O. M., 75-2275
 J. R., 75-964, 2207
 R. K., 75-1155, 1719,
 2245
 A., 75-671
 A. C., 75-517
 W. E., 75-409
 G.,
 75-44
 R., 75-908
 N. D., 75-2753
 W. A., 75-704
 N. I., 75-173, 883
 L. E., 75-3899
 A. S., 75-3216
 G. T. W., 75-1736
 E., 75-2368
 P. M., 75-2168, 3142
 (V.6), 3511
 J., 75-94
 T. W., 75-1276
 J. A., 75-3242
 T., 75-1149, 2232
 J. K., 75-1199
 N. A., 75-2903 [56]
 J., 75-2861
 H. G., 75-2302, 2305
 M. N., 75-489
 I. A., 75-783
 W. R., 75-3261
 J. M., 75-42
 J., 75-1093
 J., 75-2341, 2755
 H. H., 75-3043
 G., 75-1186
 N. Y., 75-783
 T. R., 75-65
 D. R., 75-3564, 3605
 J. P., 75-2981
 E. R., 75-1621, 2640,
 2747
 H., 75-1783
 K., 75-650
 T., 75-1761, 2500,
 3009, 3040
 M., 75-1123
 N. A., 75-3035
 I., 75-2551
 A., 75-544, 3023
 D. R., 75-1668
 G. H., 75-1432
 R. C., 75-3793, 3794
 L., 75-2252
 N. J., 75-3065
 R. W., 75-2242
 J. A. C., 75-2339
 G. E., Jr., 75-740, 1329
 J. G., 75-2886
 L. A., 75-3450
 M., 75-3473
 G., 75-2903 [27]
 H., 75-2386
 J. J., 75-3695
 I. C., 75-1812
 K. L., 75-634
 Z., 75-3160
 L. I., 75-2620
 R. J., 75-734, 735,
 1155, 1719, 2245
 B. S., 75-3341
 Gy., 75-2484
 P., 75-2022
 D. A., 75-3444
 V. S., 75-3536
 J. J., 75-2687
 H., 75-3584, 3597,
 3822
 J., 75-3387
 W., 75-2459, 2957
 G., 75-2903 [21]
 P. P., 75-1374
 R. L., 75-839, 1830
 J. K., 75-1667
 S., 75-59
 R. B., 75-1134
 R. L., 75-2449
 J.-Y., 75-101
 Z., 75-2503, 3461
 J.-F., 75-1471, 3671
 I., 75-587, 2163
 J. W., 75-2907 (3)
 V., 75-1878
 E., 75-1344, 2463,
 3464, 3527, 3591
 P., 75-561

- Paster, T. P., 75-1161
 Pastouret, L., 75-1555
 Patel, A. R., 75-164
 Patel, S. M., 75-164
 Paterson, I. A., 75-741
 Paterson, W. S. B., 75-1219
 Pathak, P. D., 75-689, 691
 Pati, U. C., 75-668
 Pătrăscu, St., 75-1710
 Patrat, G., 75-168
 Patriat, P., 75-2903 [22], 3880
 Patrick, W. H., Jr., 75-820
 Patro, B. C., 75-499
 Patroni, M., 75-751
 Patterson, C., 75-1788
 Patton, T. C., 75-2044
 Patton, Wm. W., Jr., 75-3412
 Patyk-Kara, N. G., 75-3089
 Paul, D. K., 75-3690
 Paulitsch, P., 75-1682
 Paulo, A., 75-237, 971, 2467, 3760
 Paulson, J., 75-1251
 Paulson, O. L., Jr., 75-3137
 Paverd, A. L., 75-3670
 Pavlides, L., 75-1664
 Pavlishin, V. I., 75-1808, 3496
 Pavlov, A. L., 75-260
 Pavlov, D. I., 75-350, 3179, 3817
 Pavlov, M. G., 75-513
 Pavlov, V. I., 75-25
 Pavlov, Y. A., 75-1501
 Pavlovskij, E. V., 75-2585
 Pawley, G. S., 75-163
 Payne, G. H., 75-3886
 Pazirandeh, M., 75-3672
 Pe, G. G., 75-3358, 3726
 Peach, P. A., 75-2858
 Peacock, J. D., 75-930, 3825
 Peacor, D. R., 75-1393, 2523
 Peale, S. J., 75-3902
 Pearce, G. W., 75-1256
 Pearce, J. A., 75-3766
 Pearl, R. M., 75-713, 2765, 2767
 Pearton, D. C. G., 75-2882, 2900
 Pêcher, A., 75-3842
 Peck, D. L., 75-2740
 Peckett, A., 75-1241
 Pedersen, B., 75-899
 Pedersen, K. R., 75-3372
 Pedersen, S., 75-2800
 Pedro, G., 75-2959
 Peers, R., 75-1429, 3706
 Peigneur, P., 75-2932
 Peirce, H. W., 75-963
 Pélissonnier, H., 75-908
 Pelletier, B., 75-2843
 Penberthy, J., 75-62
 Penco, A. M., 75-1947
 Pendias, H., 75-116, 579, 2567
 Pen'kov, I. N., 75-3035
 Peninghaus, H., 75-3142 (V.1)
 Pequegnat, W. E., 75-2226
 Percival, H. J., 75-2160
 Perdrix, J. L., 75-2187
 Pereira, J., 75-1958
 Pereira, W. E., 75-2380
 Perey, F. G., 75-1125
 Perfil'yev, A. S., 75-3764
 Perriaux, J., 75-614
 Périnet, G., 75-831, 2960, 2961
 Perkins, H. F., 75-2944
 Perkins, R. W., 75-1131
 Perlaki, E. I., 75-2633
 Perna, G., 75-919, 1333
 Perret, R., 75-3046
 Perri, F., 75-2201
 Perrie, L. A., 75-2858
 Perrotta, A. J., 75-2103, 2154
 Perry, E. A., Jr., 75-381, 2335
 Perry, E. C., Jr., 75-2221, 2222
 Perry, N., 75-789
 Perry, R., 75-789
 Pertsen, N. N., 75-1121
 Perucaud, M. C., 75-682
 Perumal, N. V. A. S., 75-453
 Peselnick, L., 75-699
 Pesty, L., 75-2143, 2159
 Peter, J.-P., 75-3046
 Peterman, Z. E., 75-1725
 Peters, C. T., 75-1140
 Peters, F. A., 75-3119
 Peters, J. M., 75-780
 Peters, Tj., 75-1993, 2948
 Petersen, O. V., 75-66, 3582
 Petersil'ye, I. A., 75-3415
 Peterson, M. D., 75-2637
 Petreus, I., 75-1890
 Petrov, A. I., 75-2549
 Petrov, B. V., 75-1631
 Petrov, T. G., 75-2203
 Petrova, N. S., 75-1182
 Petrovskaya, N. V., 75-1347
 Petrovskiy, A. D., 75-2267
 Petrowski, C., 75-422, 2349
 Petruk, W., 75-3559, 3564
 Petruian, N., 75-67
 Petukhov, A. V., 75-383
 Peucat, J.-J., 75-3628, 3828
 Peyve, A. V., 75-3764
 Pezerat, H., 75-2940
 Pfaffl, F., 75-1679
 Pfeufer, J., 75-936
 Phadtare, P. N., 75-580
 Phakey, P. P., 75-471
 Pham-Van-Ngoc, 75-3877
 Phaup, A. E., 75-2608
 Phene, S. G., 75-2473
 Philip, P., 75-3655
 Philip, R. P., 75-1794
 Philippi, G. T., 75-408
 Philipsborn, H. v., 75-994
 Phillip, D., 75-3513
 Philippi, C. M., 75-3022
 Phillips, E. R., 75-1432, 2534, 3285
 Phillips, P. R., 75-1124
 Phillips, R., 75-62
 Philp, R. P., 75-1186
 Philpotts, J. A., 75-3427
 Pias, J., 75-2799
 Piboule, M., 75-3829
 Piccarretta, G., 75-2425, 3832
 Pichamuthu, C. S., 75-2689
 Pichler, H., 75-2638
 Pickering, J. G., 75-2133
 Picot, P., 75-1395, 3142 (IV.3)
 Pidgeon, R. T., 75-2834
 Pidorya, M. M., 75-686
 Pieper, G., 75-3244
 Pierce, J. W., 75-2917
 Pierce, L., 75-1930
 Pierce, R. H., Jr., 75-1196
 Pies, W., 75-1809
 Pieters, C., 75-3434
 Pigg, J. C., 75-1886
 Pike, R. J., 75-2363
 Pilipchuk, M. F., 75-363
 Pilkey, O. H., 75-2454
 Pillinger, C. T., 75-1240
 Pinault, M., 75-3788
 Pinger, A. W., 75-2042
 Pinna, P., 75-561
 Pinnavaia, T. J., 75-78, 114, 1819
 Pinus, G. V., 75-2580
 Piper, D. Z., 75-1144, 3362, 3369
 Piper, T. B., 75-3898
 Pippi, L., 75-3498
 Pirajno, F., 75-2607
 Pirani, R., 75-2427, 2434
 Pisarevskii, Yu. V., 75-2733
 Piskunov, L. I., 75-396
 Pitcher, W. S., 75-1462
 Pittman, E. D., 75-2654
 Pivec, E., 75-2683
 Piwinskii, A. J., 75-574
 Plant, A. G., 75-435, 3552, 3594
 Plant, J., 75-62
 Platford, R. F., 75-3149
 Platonov, A. N., 75-3526
 Platt, R. G., 75-3681
 Playford, P. E., 75-1429
 Pleysier, J., 75-806, 807
 Plimer, I. R., 75-1366, 2033
 Ploquin, A., 75-561
 Ploshko, V. V., 75-1301
 Plowman, C., 75-1313
 Plummer, L. N., 75-3229
 Pluth, J. J., 75-1913
 Plyashkevich, L. N., 75-1347
 Pobeguino, Th., 75-3336
 Poborski, J. W., 75-2057
 Podolak, M., 75-2378, 2777
 Podol'skikh, L. D., 75-2466
 Poel, D. V., 75-812
 Poirot, J. P., 75-1119
 Pogorelov, B. S., 75-627
 Pogorelov, Yu. L., 75-2998
 Poitout, M., 75-561
 Poitout, M.-J., 75-561
 Pokachalova, O. S., 75-2679
 Pokrovskiy, P. V., 75-324
 Pokrovskiy, V. A., 75-3865
 Polezhaev, Yu. M., 75-440
 Polkanov, Yu. A., 75-944, 1075
 Pollack, J. B., 75-3862, 3909, 3911
 Pollard, C. O., Jr., 75-3524
 Polonio, J. B., 75-48
 Polvéche, J., 75-3863
 Pomykata, J., 75-2658
 Pongiluppi, D., 75-1344, 2463, 3591
 Ponnampuruma, C., 85-794, 2379
 Ponte, F. C., 75-2903 [32]
 Poole, A. B., 75-2883
 Poole, J. L., 75-958, 959
 Poore, M. E. D., 75-197
 Poornachandra Rao, M., 75-1565
 Popova, N. M., 75-2453
 Poppi, L., 75-1837, 1848
 Porada, H., 75-3669
 Portugal V. Ferreira, M. R., 75-2461
 Posner, A. M., 75-76, 808
 Pospelova, L. N., 75-1293
 Post, J. L., 75-96
 Poster, C. K., 75-1660
 Potter, J. E., 75-614
 Potter, T. L., 75-563
 Poty, B. P., 75-1330
 Poubová, M., 75-2548
 Poucllet, A., 75-3731
 Pough, F. H., 75-1104
 Poulain, D., 75-1316
 Povarennykh, A. S., 75-3526
 Povondra, P., 75-3461
 Powell, J., 75-62
 Powell, J. L., 75-725, 1152
 Powell, M., 75-2395
 Powell, R., 75-245, 1603, 2395
 Powell, T. G., 75-1217
 Pozharitskaya, L. K., 75-1599
 Pozzuoli, A., 75-3308
 Prager, P. R., 75-190
 Prandi, A., 75-2761
 Prasad, R., 75-1951
 Prasad, S. N., 75-1669
 Prasolov, E. M., 75-317, 1138
 Prato, R., 75-1606
 Preiss, W. V., 75-3576
 Pressnall, D. C., 75-1011
 Preston, J., 75-1297
 Prestvik, T., 75-2400
 Pretorius, D. A., 75-1967
 Prewitt, C. T., 75-1939, 2999, 3555
 Price, N. B., 75-58
 Price, P. B., 75-1266
 Price, V., Jr., 75-375
 Priem, H. N. A., 75-20
 Prince, E., 75-176
 Pringle, G. J., 75-524, 1329
 Prinz, M., 75-514, 1249, 2342, 2345, 3424
 Pritchard, A. M., 75-870
 Privett, D. R., 75-540, 652
 Prober, J. M., 75-853
 Proctor, P. D., 75-1437
 Prokhorov, K. V., 75-1324
 Prokhorov, V. S., 75-1173
 Prokopchuk, B. I., 75-244
 Prokopovich, N. P., 75-2958
 Prokoptsev, N. G., 75-2646
 Proshchenko, E. G., 75-3465
 Prost, A., 75-561
 Prost, R., 75-27
 Prouvost, J., 75-3558
 Provost, J., 75-1655
 Pryce, M. W., 75-550, 552, 1916, 1944
 Pryor, R. N., 75-62
 Przenioslo, S., 75-941
 Puchelt, H., 75-378
 Puchelt, H. R., 75-2127
 Pudovkina, Z. V., 75-2524, 2526, 2532
 Puffer, J. H., 75-2628, 2983
 Puhán, D., 75-2080
 Puigdefàbregas, C., 75-614
 Punzet, M., 75-3224
 Pupin, J.-P., 75-1287, 3454, 3494
 Purto, V. K., 75-3518
 Purushottam, A., 75-39
 Pustyl'nikov, A. I., 75-3587, 3588
 Putman, G. W., 75-2209
 Putnis, A., 75-1037
 Puustinen, K., 75-3489, 3495
 Pyatenko, Yu. A., 75-1888
 Pyle, T. G., 75-2903 [51]
 Pytkowicz, R. M., 75-3225
 Quaide, W. L., 75-1251
 Quam, L., 75-3909
 Quantin, P., 75-849
 Quernardel, J.-M., 75-561
 Quesnel, G., 75-561
 Quin, B. F., 75-2339
 Quinn, J. G., 75-372, 1215
 Quirk, J. P., 75-76, 808
 Qureshi, M. H., 75-3126, 3127
 Quarfort, U., 75-2273
 Raafat, A. M., 75-1789
 Raase, P., 75-2699
 Raauwe, J., 75-1749
 Rabinowitz, P. D., 75-2903 [6]
 Radcliffe, S. V., 75-2344
 Radford, A. J., 75-2875, 2877

- akkrishna Murthy, I. V., 5-692
 ke, A. S., 75-527, 1390
 alescu, D., 75-1710
 er, T. A., 75-2210
 avendra, R. V., 75-243
 ein, E., 75-2692
 eim, A., 75-2136, 2428, 2561
 an, S., 75-2416
 mani, R. A., 75-3458
 hlin, A. I., 75-434
 h, M., 75-1892
 gopalan, S. R., 75-218
 mani, V., 75-1939, 2999, 3555
 n, R. S., 75-425, 1266
 usekaran, K. C., 75-449
 u, R. D., 75-3354
 ucheyev, A. D., 75-205
 rovskiy, E. Ye [E], 75-2219
 B337
 ston, C. E., 75-1237
 i, U. S., 75-879
 akkrishnan, M., 75-465
 amamoorthy, P., 75-2125
 mana, Y. V., 75-2745
 mana Rao, N., 75-1996
 manathan, P. S., 75-823
 manna, K., 75-580
 maswamy, A., 75-488
 nberg, H., 75-2694, 3776
 usay, C. R., 75-646
 usay, J. G., 75-1620
 usay, W. R. H., 75-2038
 dle, K., 75-1223
 chorst, H. J., 75-22
 kama, K., 75-3796
 r, A. T., 75-458
 r, B. S. R., 75-692
 o, H. S., 75-2230
 o, J. S. R. K., 75-3354
 o, K. S. R., 75-458
 o, K. V. K., 75-667, 3860
 o, M. V. M. S., 75-2745
 o, P. N., 75-599
 o, T. R., 75-479, 669
 o, V. D., 75-339
 o, Y. J., 75-647
 ould, J.-F., 75-2438
 pp, G. R., Jr., 75-790
 pp, J. B., 75-964
 uschka, H., 75-1706
 ashid, M. A., 75-1185, 1221, 3391
 asmussen, M., 75-1154, 2650
 astogi, M. C., 75-824
 astogi, S. P., 75-631
 atajczak, T., 75-3786
 atcliffe, D. A., 75-197
 ateyev, M. A., 75-480, 2962
 aufuss, W., 75-225
 aup, O. B., 75-2060, 2283
 ausell-Colom, J. A., 75-110, 294
 autureau, M., 75-1905, 2941, 3445
 avenne, C., 75-2903 [37]
 avior, E., 75-3262
 awcliffe, R. D., 75-2375
 ay, G. E., 75-663
 ay, S., 75-3297, 3463
 ay, S. K., 75-1424
 ayabinin, Yu. N., 75-3178
 aybould, J. G., 75-932
 ayment, B. D., 75-2017
 ayner, J. H., 75-153, 829
 Razin, L. V., 75-3568
 Rea, J. R., 75-3058
 Read, H. H., 75-2911
 Read, J. L., 75-34
 Recker, K., 75-1114, 1384, 3476
 Recq, M., 75-1544
 Reddy, B. J., 75-3050
 Reddy, K. P., 75-665
 Reddy, M. N., 75-1996
 Reddy, M. R., 75-2944
 Reed, B. L., 75-333
 Reed, G. W., Jr., 75-2490
 Reed, J. S., 75-3025, 3185, 3186, 3188
 Reed, P. R., Jr., 75-1777
 Reed, S. J. B., 75-774, 2912
 Reed, T. B., 75-3202
 Reese, R. L., 75-248
 Reesman, A. L., 75-1059, 1826
 Reeves, T. J., 75-3081
 Refaat, A. M., 75-1314
 Regab, A. G. I., 75-1315
 Rehfuss, D. E., 75-2359
 Rehtijärvi, P., 75-3586, 3589
 Reid, A. F., 75-1023
 Reid, A. M., 75-612
 Reid, K. O., 75-1454
 Reiff, W., 75-1281
 Reik, G. A., 75-1435
 Reilly, T. A., 75-3101
 Reimer, T. O., 75-3087
 Rein, G., 75-2598
 Reineck, H.-E., 75-614
 Reinboth, L., 75-1369
 Reinking, R. K., 75-988
 Remizov, V. I., 75-86
 Remo, J. L., 75-2390
 Remond, G., 75-3142 (II.9)
 Rémy, J.-M., 75-3841
 Renard, V., 75-2903 [20]
 Renault, J., 75-2246
 Rengasamy, P., 75-1755, 2946
 Reno, H. T., 75-909
 Renouf, J. T., 75-3627
 Rensberger, J. M., 75-585
 Rentzsch, J., 75-908
 Reshetnyak, N. B., 75-434
 Revcolevschi, A., 75-3142 (II.2)
 Revel, G., 75-3142 (II.2)
 Reverdatto, V. V., 75-2679
 Rex, D. C., 75-2819
 Rex, R. W., 75-3745
 Reynolds, J. W., 75-3851
 Reynolds, P. H., 75-730, 738, 747
 Rhoden, H. N., 75-62
 Rhodes, J. M., 75-612
 Rhodes, R. C., 75-3701
 Rhys, G. H., 75-1400, 1406
 Ribbe, P. H., 75-1286, 1907, 1946, 3005, 3018, 3483, 3515
 Ricci, C. A., 75-2682, 2702, 2703
 Rice, J. M., 75-3482
 Rice, S. A., 75-1952, 2996
 Rich, C. I., 75-800
 Richard, P., 75-1949
 Richards, J. R., 75-1717
 Richardson, D. M., 75-3142 (IV.4)
 Richardson, S. M., 75-2426
 Richardson, S. W., 75-2747
 Richerson, D. W., 75-3304
 Richter, D., 75-1546
 Richter, P., 75-1628
 Rickard, D. T., 75-908, 921
 Rickard, L. V., 75-2059
 Ridge, M. J., 75-3158
 Ridler, R. H., 75-415, 603
 Ridley, W. I., 75-605, 612
 Riehle, J. R., 75-2791
 Riera, M., 75-3366
 Riess, D., 75-2845
 Rietz, E., 75-2907 (1)
 Rigby, D., 75-2213
 Righini, F., 75-1752
 Riley, J. F., 75-2498, 3500
 Rinaldi, R., 75-1343, 1913
 Rindfleisch, T. C., 75-2380
 Rinehart, C. D., 75-2841
 Ringwood, A. E., 75-420, 2169
 Riquelme, J., 75-2729
 Rita, F., 75-1442, 1709
 Rita, R. A., 75-3245
 Ritz, C., 75-1393
 Rivalenti, G., 75-3612
 Rivière, A., 75-2862
 Roaldset, E., 75-1846, 3323
 Robaszynski, F., 75-3835
 Robb, W. A., 75-1370
 Robelen, P. G., 75-1481
 Roberson, H. E., 75-2936
 Robert, J.-L., 75-290
 Robert, M., 75-2975
 Robert, P., 75-3789
 Robert, R. V. S., 75-2876
 Roberts, A. A., 75-2886
 Roberts, D. E., 75-2736
 Roberts, D. G., 75-1513, 1514, 1515, 2538, 2903 [25]
 Roberts, H. H., 75-1791, 3390
 Roberts, J. L., 75-2594
 Roberts, W. L., 75-790
 Robertson, A. H. F., 75-3767
 Robertson, D. K., 75-16
 Robertson, E. C., 75-2740
 Robertson, J. K., 75-1017, 3267
 Robertson, R. C. R., 75-587
 Robin, P.-Y. F., 75-2724, 2731
 Robinson, A. L., 75-3143
 Robin, C., 75-3713, 3714
 Robinson, B. W., 75-1148
 Robinson, J. W., 75-2873
 Robinson, K., 75-3483
 Robinson, K. W., 75-3868
 Robinson, P., 75-2417
 Robinson, P. D., 75-175
 Robinson, S. W., 75-2302
 Robitsch, J., 75-2866
 Robson, G. R., 75-3744
 Rockett, T. J., 75-2126, 3196
 Rode, K. P., 75-1812
 Rodgers, K., 75-1130
 Rodgers, K. A., 75-477, 842, 1308, 2651
 Rodriguez Perez, S., 75-769
 Roebroek, E. J., 75-3882
 Roedder, E., 75-1242
 Roeder, P. I., 75-3145, 3176
 Roeland, I., 75-38
 Roelandts, I., 75-780
 Roether, W., 75-2304, 2311
 Rogers, J., 75-1000
 Rogers, W. C., 75-3403
 Roggiani, A. G., 75-1674
 Rogova, V. P., 75-548
 Rogozyanskaya, L. M., 75-185
 Rohrbacher, R. G., 75-995
 Rohrllich, V., 75-1963, 2663
 Rolandson, S., 75-898
 Rolfe, G. L., 75-840
 Rollaron, R. G., 75-954
 Rollet, M., 75-561, 3639
 Romiez, M., 75-422
 Roobol, M. J., 75-1456
 Roonwal, G. S., 75-1383
 Rooth, C. G., 75-2305
 Rose, A. W., 75-1177
 Rose, H. J., Jr., 75-3901
 Rose, W. I., Jr., 75-606, 1971, 3749, 3753, 3756, 3757
 Rosenbaum, M. S., 75-1491
 Rosenberg, P. E., 75-3277
 Rosenblum, S., 75-749, 1991, 3550
 Roseboom, E. H., Jr., 75-2079
 Rose-Hansen, J., 75-1780
 Rösick, U., 75-2121
 Rosman, K. J. R., 75-53, 1260
 Ross, D. A., 75-2903 [50]
 Ross, D. C., 75-1483
 Ross, G. J., 75-290, 800, 819
 Ross, J. V., 75-1433
 Ross, M., 75-2417
 Ross, S. D., 75-59
 Rossi, G., 75-3017, 3052
 Rossi, P. L., 75-1442, 2437, 2565, 3631
 Rossignol, J.-C., 75-2754
 Rossman, G. R., 75-151, 487, 1300, 3384
 Rossovskii, L. N., 75-211, 593
 Rost, F., 75-1290, 1291
 Roth, C. B., 75-1823, 2931
 Rothman, V. K., 75-351
 Roubault, M., 75-1464
 Rouchaud, J.-C., 75-3142 (II.2)
 Rouhunkoski, P., 75-3098
 Rouse, K. D., 75-186
 Rouse, R. C., 75-2530
 Rousset, C., 75-2960
 Routhier, P., 75-907, 3083
 Roux, J., 75-1072, 2164
 Rowe, J. J., 75-401
 Rowlands, N. J., 75-908
 Rowley, P. D., 75-2828
 Rowsell, D. M., 75-2977
 Roy, A. K., 75-2448
 Roy, D. M., 75-2179
 Roy, D. W., 75-694
 Roy, H., 75-2921
 Roy, J. L., 75-2774
 Roy, K. J., 75-1692
 Roy, R., 75-64, 1046, 2179
 Roy-Choudhury, K., 75-2109
 Royle, A. G., 75-62
 Rozhdestvenskaya, I. V., 75-1903
 Rozhkov, I. S., 75-2219, 3338
 Rozin, A. A., 75-404
 Rozinova, E. L., 75-227
 Rozov, B. N., 75-2066
 Rubeykin, V. Z., 75-2291, 2314
 Rubin, M., 75-3742
 Rucklidge, J., 75-3000
 Rudashevsky, N. S., 75-525, 2825
 Rudenko, N. I., 75-228
 Rudert, V., 75-2167
 Rudnik, G. B., 75-1523, 2649
 Rueffel, P. G., 75-3129
 Ruh, R., 75-3196
 Rui, I. J., 75-2016
 Rumble, D. III, 75-442
 Runciman, W. A., 75-146, 147, 1897
 Runcorn, S. K., 75-2358
 Rundle, C. C., 75-2538
 Rundle, L. M., 75-36
 Rupke, N. A., 75-1550
 Ruppel, E. T., 75-1460
 Russell, G. M., 75-771
 Russell, J. D., 75-59, 158
 Russell, M. J., 75-322
 Ruth, E., 75-390
 Rutte, E., 75-1281
 Růžek, J., 75-3294
 Ruzhentsev, S. V., 75-3634, 3764
 Ryabchikov, I. D., 75-2085, 3179
 Ryan, M. P., Jr., 75-2376
 Rybach, L., 75-3867
 Ryder, G., 75-2582

- Rye, D. M., 75-193
 Ryka, W., 75-579, 662
 Rylov, G. M., 75-861
 Ryskin, Ya. I., 75-59
 Ryszka, J., 75-2967
 Ryzhenko, B., 75-3208
- Saad, K., 75-397
 Saad, N. A., 75-974
 Saager, R., 75-2332
 Saalfeld, H., 75-170
 Saavedra, J., 75-769
 Sabatier, G., 75-3142 (I.9)
 Sabatini, G., 75-2546, 2566, 2682, 2703
 Sabelli, C., 75-885, 3062
 Sabina, A. P., 75-707
 Sabine, P. A., 75-3078
 Sabourdy, G., 75-3514
 Sachs, I. B., 75-3507
 Sadashivaiah, M. S., 75-1450, 1452, 1633, 2720
 Sadler, P. M., 75-3626
 Saehr, D., 75-3281, 3282
 Saenz, R., 75-3758
 Sagan, C., 75-3900, 3909
 Saggerson, E. P., 75-645, 2913, 3836
 Saha, A. K., 75-1473, 2240, 2622
 Saha, P., 75-261, 2101, 2174
 Sahama, Th. G., 75-2476, 2521, 3586, 3589, 3601
 Sahay, G. J., 75-1812
 Sahl, K., 75-892
 Sahu, B. K., 75-24, 499, 1744
 Sahu, K. C., 75-516, 2666
 Sahu, K. N., 75-230, 668
 Saito, K., 75-132
 Saito, M., 75-292, 485
 Saito, N., 75-318
 Saito, S., 75-3198
 Saitta, M., 75-47
 Sajid, H. A., 75-2393
 Sakae, T., 75-3585
 Sakai, H., 75-422
 Sakai, T., 75-2239
 Sakata, M., 75-897
 Sakamoto, M., 75-129
 Sakharova, M. S., 75-706
 Sakhibgareyev, R. S., 75-627, 2667
 Sakhno, V. G., 75-445
 Saklani, P. S., 75-1812
 Salamon, W., 75-971, 2467
 Salanci, B., 75-2111
 Salazar, O., 75-3750
 Salikhov, V. S., 75-208
 Salisbury, J. W., 75-3441
 Salmon, J. F., 75-2145
 Saltykovskiy, A. Ya., 75-1447
 Samama, J.-C., 75-3096
 Sammis, C. G., 75-1659
 Samoilovich, M. L., 75-2466
 Samoylov, V. S., 75-1599
 Samusikov, V. P., 75-948
 Sanchez, P. A., 75-2972
 Sancho, J., 75-2903 [52]
 Sandberg, P. A., 75-1688
 Sanderson, D. J., 75-2544
 Sandler, S. I., 75-853
 Sandomirskii, P. A., 75-149
 Sandrea, A., 75-1262
 Sangwal, K., 75-2737
 Sankaran, A. V., 75-597, 2240
 Sankar Das, M., 75-823
 Santacroce, R., 75-3730
 Santarelli, N., 75-561
 Santos, A. M., 75-330
 Santos, A. R. dos, 75-3475, 3664
- Saravanan, S., 75-2029, 2404
 Sarin, V. K., 75-62
 Sarkar, S., 75-229
 Sarkar, S. C., 75-229
 Sarkisyan, S. G., 75-2974
 Sarma, V. A. K., 75-1755, 2946
 Sarsadskikh, N. N., 75-594
 Sartori, R., 75-2511
 Sasaki, A., 75-522, 1141
 Sastri, J. C. V., 75-360, 2251
 Sastri, V. V., 75-1563
 Sastry, M. S., 75-444
 Satava, V., 75-2115, 3220, 3221
 Satish, P. N., 75-484, 521, 2030
 Sato, H., 75-3704
 Sato, K., 75-1141, 1821, 3508
 Satyanarayana, B., 75-2218
 Satyanarayana, K., 75-339, 2719, 3397
 Saul, J. M., 75-5, 2185
 Sauman, Z., 75-3260
 Sautereau, J.-P., 75-2954
 Sauvage, M., 75-1950
 Savaşçin, M. Y., 75-2604
 Savell'yer, A. A., 75-1191
 Savin, S. M., 75-2867, 3329
 Savkevich, S. S., 75-3330
 Savon, A. D., 75-3533
 Sawa, H., 75-3856
 Sawatzki, G., 75-1985
 Sawers, J. D., 75-219, 952
 Sawhney, B. L., 75-101
 Sawkins, F. J., 75-193
 Saxena, M. N., 75-1812
 Saxena, S. K., 75-3168
 Sayles, F. L., 75-2294, 3402
 Scarborough, W. H., 75-2003
 Scarfe, C. M., 75-1015, 3174
 Scafe, D. W., 75-136
 Schafer, C. T., 75-1517
 Schaller, W. T., 75-1381
 Schalscha, E. B., 75-2945
 Scharbert, H. G., 75-3834
 Schatz, R. H., 75-1673
 Schau, M., 75-346
 Schauwecker, D. S., 75-1161
 Scheidecker, R., 75-2327
 Schellman, W., 75-198, 215
 Schenk, E., 75-1706
 Schepers, J. S., 75-814
 Scherp, A., 75-2052
 Schidlowski, M., 75-3389
 Schiffman, C. A., 75-1079
 Schilling, J.-G., 75-1151, 1152
 Schilling, P. E., 75-1740
 Shimizu, H., 75-1870
 Shimizu, N., 75-2093
 Schindler, D. W., 75-1172
 Schipper, D. J., 75-3305, 3306
 Schlee, J., 75-1589
 Schley, R., 75-1751
 Schloemer, H., 75-1290
 Schmetzer, K., 75-1083, 1084, 1090, 1093, 1372, 3311, 3479
 Schmid, F., 75-2097
 Schmid, K., 75-3084
 Schmidt, D. L., 75-2828
 Schmidt, K., 75-1625, 1628
 Schmidt, V. A., 75-2750
 Schmidt-Mende, P., 75-200
 Schmitt, H. H., 75-1233
 Schmitt, R. A., 75-1276
 Schneeberg, E. P., 75-1040
 Schneider, E., 75-2366
 Schneider, G., 75-1016, 3266
 Schneider, H., 75-1062
 Schneider, S. J., 75-3231
 Schneider, W., 75-1332
 Schneidermann, N., 75-1688
- Schnepfe, M. M., 75-770
 Schnitzer, M., 75-112
 Schock, H. H., 75-378, 2127
 Schoen, R., 75-138
 Scholl, D. W., 75-2903 [35]
 Schopf, J. M., 75-1594, 2668
 Schornick, J. C., 75-1167
 Schreyer, W., 75-1627, 2407, 3251, 3462
 Schrijver, K., 75-3847
 Schubert, G., 75-2796, 3902
 Schubert, W., 75-1628, 2712
 Schuele, D., 75-1747
 Schuhmann, S., 75-3427
 Schüller, K. H., 75-1065
 Schulman, N., 75-1715
 Schultz, J. M., 75-853
 Schultz, R. L., 75-3161
 Schultz, R. W., 75-1974
 Schulz, H., 75-2739
 Schumann, H., 75-2738
 Schumm, S. A., 75-2795
 Schwarcz, H. P., 75-384, 1205
 Schwartz, A. W., 75-2205
 Schwartz, F. W., 75-394
 Schwartzman, D. W., 75-1122
 Schwarz, E. J., 75-2751
 Schwarzbach, M., 75-791
 Schwarzer, T. F., 75-3418
 Schweinsberg, H., 75-1912
 Schwerdtner, W. M., 75-1640, 3779
 Schwertmann, U., 75-3190
 Sciarrello, J. P., 75-3222
 Scotford, D. M., 75-2452
 Scott, A. D., 75-816
 Scott, E. R. D., 75-1267
 Scott, S. D., 75-1032, 1033, 3556
 Scrutton, R. A., 75-2903 [47]
 Scurfield, G., 75-500
 Seaman, D. M., 75-2493, 2758
 Seddo, F. K., 75-2959
 Seely, D. R., 75-2903 [18]
 Seeta Ramaiah, H. L., 75-218
 Segalen, P., 75-849
 Segnit, E. R., 75-500
 Seguin, M. K., 75-3233
 Seibold, E., 75-2903 [13]
 Seidel, E., 75-2712
 Seifert, F., 75-3251
 Seifouline, S. Ch., 75-908
 Seim, R., 75-2237
 Seita, M. F., 75-2517
 Seki, Y., 75-456, 650
 Selby, L. A., 75-1133
 Self, S., 75-2631, 3768
 Selivanovskaya, T. V., 75-434
 Selo, M., 75-2832, 3453
 Selwood, E. B., 75-2806
 Semenov, E. I., 75-1392, 1396, 1398, 2525, 2526, 3465
 Semenov, G. G., 75-352
 Semet, M. P., 75-3439
 Semler, C. E., 75-3290
 Senderov, E. E., 75-3142 (V.7)
 Sengupta, D., 75-146, 147
 Senina, V. A., 75-332
 Sennett, P., 75-100
 Serdyuk, Z. Ya., 75-404
 Serebryanny, B. L., 75-2219
 Sergeant, G. A., 75-34, 35
 Sergeev, O. A., 75-2725
 Sergeev, V. M., 75-3048
 Sergiyenko, I. Z., 75-2206
 Serment, R., 75-925
 Serratos, J. M., 75-110
 Sersale, R., 75-3249
 Servotte, G., 75-848
 Seskutov, A. A., 75-947
- Sethi, A., 75-1831
 Setlow, L. W., 75-2671
 Settle, M., 75-2364, 2634
 Sevastopulo, C. D., 75-3082
 Sevcu, J., 75-2504
 Seward, T. M., 75-1070
 Sewell, D. K. B., 75-2347
 Seyranian, V. B., 75-3090
 Shaalan, M. M. B., 75-1349
 Shadlun, T. N., 75-534, 1363
 Shafiqullah, M., 75-723
 Shafranov, N. K., 75-256
 Shah, J. J., 75-781
 Shah, M. R., 75-2621
 Shah, S. K., 75-242
 Shaikh, N. A., 75-2472
 Shainberg, I., 75-2930
 Shakir, K., 75-1959
 Shamanina, T. L., 75-228
 Shand, J. A., 75-721
 Shanin, L. L., 75-1121
 Shankland, T. J., 75-167
 Shapiro, L., 75-31
 Sharapov, V. N., 75-389, 2095
 Sharma, P. V., 75-3873
 Sharma, R. S., 75-3843
 Sharma, T., 75-2268
 Sharma, V. C., 75-187, 1948
 Sharp, J. H., 75-3159
 Sharp, W. N., 75-3711
 Sharpov, V. N., 75-2679
 Shashkin, D. P., 75-2527
 Shatkov, G. A., 75-314
 Shatkova, L. N., 75-314
 Shaw, D. M., 75-1274
 Shaw, J. H., 75-3156
 Shaw, J., 75-2189
 Shaw, S. E., 75-1432, 2625
 Shaw, V. E., 75-2215
 Shchepetkin, Yu. V., 75-2998
 Shcherbakov, V. N., 75-161, 874
 Shcherbakov, V. S., 75-1559
 Shcherbakova, M. Ya., 75-878, 3055
 Shcherban, I. P., 75-2257, 3180
 Shcherbovich, G. V., 75-227
 Shea, F. S., 75-3138
 Shelekhov, A. N., 75-210
 Shelley, D., 75-2691
 Shelton, B. J., 75-761
 Shemyakin, V. M., 75-3487
 Shen, B.-M., 75-1055
 Sheng, K.-Y., 75-1735
 Shepel', A. B., 75-447
 Shephard-Thorn, E. R., 75-2657
 Sheppard, N. W., 75-1454
 Sheppard, R. A., 75-507, 1588, 2460
 Sheppard, S. M. F., 75-384
 Sheridan, R. E., 75-2903 [29]
 Sherstkov, Yu. A., 75-1908
 Sherwood, D. W., 75-1125
 Shideler, G. L., 75-1593
 Shido, F., 75-1516, 1525, 2643
 Shih, C., 75-612
 Shih, C.-H., 75-2032
 Shih, C.-Y., 75-4, 344
 Shilin, A. V., 75-2974
 Shilin, N. L., 75-2219
 Shilo, N. A., 75-3071
 Shilts, W. W., 75-415, 1583
 Shima, H., 75-30, 54, 55, 526, 531, 532, 533
 Shimamoto, K., 75-910
 Shimanuki, T., 75-1779
 Shimizu, H., 75-126
 Shimizu, N., 75-1058
 Shimoda, S., 75-93, 817, 1842, 1863, 1865, 1868, 2436, 3012
 Shimokawa, T., 75-2254

- Hosaka, K. 75-125, 1841
 Iron, A. E. 75-2605, 2606
 B. W., 75-951
 ovalov, Yu. V., 75-3468, 7580
 iishi, N., 75-1818
 iwa, T., 75-50
 k, J., 75-2385
 kikh, I. N., 75-3180
 onosova, G. P., 75-251
 akin, N. N., 75-525
 ov, V. A., 75-434
 aarahiah, K. S., 75-1997, 7030
 ahta, P. J. 75-1909
 akin, B. M., 75-1812, 3015
 ulovich, K. I., 75-1060
 i, S., 75-1872
 okhnev, V. V., 75-3415
 ok, C. A., 75-3131
 G. G., Jr., 75-2903 [43]
 e, J., 75-3230
 ený, O., 75-337
 eve, R., 75-3879
 ernberg, A. A., 75-178
 eys, N. A., 75-3764
 eurova, N. A., 75-2453
 ekla, M. K., 75-1812
 leshko, I. K., 75-1191
 mailov, Yu. V., 75-3071
 mskaya, N. I., 75-3567
 myatskaya, N. G., 75-1396
 ygina, Ye [E.] V., 75-207
 ler, R., Jr., 75-1686
 yskiy, Yu. D., 75-204
 emberger, Yu. N., 75-3637
 etsova, I. V., 75-1350
 ay, D. F., 75-2678
 iquie, H. N., 75-3800
 ris, C., 75-687
 orenko, G. A., 75-303, 528, 1301
 orenko, O. V., 75-2525
 orov, A. F., 75-525
 orov, V. A., 75-3212
 ert, R. M., 75-1047, 3275
 edlecka, A., 75-2457, 3790
 dler, G., 75-1691
 gel, F. R., 75-2917
 gfried, R. W., II, 75-2783
 gel, W., 75-2019
 mes, H., 75-3183
 mon, J. E., 75-980
 esser, W. G., 75-2660, 2903 [47]
 ever, R., 75-2199
 ghinolfi, G. P., 75-330, 385, 2239
 gurdsson, H., 75-1519
 gurgeirsson, T., 75-1502
 gvaldason, G. E., 75-347, 2642
 vola, J., 75-2894, 3589
 kora, W., 75-2950
 berman, M. L., 75-2207
 litoe, R. H., 75-1972, 3066
 lva, E., 75-2729
 lva, G. V. V., 75-989
 lva, K. K. M. W., 75-949
 l'vestrova, I. M., 75-2733
 mboli, G., 75-1442, 2564, 2565, 3631
 mmons, E. C., 75-2687
 mmons, W. B., Jr., 75-2523
 mon, F. O. 75-2871
 mon, J., 75-1746
 mon, J. A. 75-2668
 mon, P., 75-202
 mon, W., 75-1281
 monds, C. H. 75-3423
 monov, M. A., 75-149, 3060
 Simons, F. S., 75-3709
 Simpson, A., 75-2697
 Simpson, D. R., 75-2123
 Simpson, E. S. W., 75-2903 [47]
 Sims, P. K., 75-1969
 Sinclair, A. J., 75-2204, 2332
 Sinclair, W. D., 75-982
 Sinex, S. A., 75-1212
 Singer, A., 75-134, 838, 1854, 1856, 1857
 Singer, S. F., 75-1252
 Singers, W., 75-400
 Singh, A. K., 75-1045
 Singh, G., 75-879
 Singh, G. D. S., 75-705
 Singh, I. B., 75-631, 1812
 Singh, L., 75-2268
 Singh, S. S., 75-2928
 Sinha, A. K., 75-242, 2835
 Sinha, B. P. C., 75-705
 Sinha, R. C., 75-2251
 Sinha, R. N., 75-1563
 Sirkin, L. A., 75-2981
 Sirvas, E. B., 75-2046
 Sitaramayya, S., 75-598
 Sivoronov, A. A., 75-664
 Skaarup, P. 75-1979
 Skarestad, M., 75-1124
 Skelton, B. J., 75-2881
 Skinner, H. C. W. 75-3234
 Skinner, R., 75-3652
 Skippen, G., 75-3162
 Skripchenko, N. S., 75-1356
 Skvortsova, K. V., 75-3074
 Slater, D., 75-3503
 Slatkine, A., 75-2663
 Slatt, R. M., 75-359, 3772
 Sleight, A. W., 75-1921
 Sliter, W. V. 75-1692
 Slobodskoy, R. M., 75-387
 Slyusarev, A. P., 75-1359
 Smagin, A. G. 75-3854
 Smale, D., 75-3799
 Smart, R. M., 75-2178
 Smart, R. St. C., 75-1830
 Smee, B. W., 75-2328
 Smejkal, V., 75-3343
 Smellie, J. A. T., 75-1288
 Smewing, J. D., 75-386, 1521
 Smid, J., 75-1004
 Smirnov, Ya. B., 75-3865
 Smirnova, M. N., 75-1446
 Smirnova, N. L., 75-1877
 Smith, A. E., Jr., 75-2766
 Smith, A. J., 75-851
 Smith, A. R., 75-325
 Smith, D., 75-602, 1050
 Smith, D. B., 75-2056
 Smith, D. G. W., 75-774, 2986
 Smith, D. K., 75-3219
 Smith, D. L., 75-2746
 Smith, E. G., 75-1406
 Smith, E. I., 75-3916
 Smith, F. W., 75-235, 1603
 Smith, I. E., 75-1524
 Smith, I. F., 75-586
 Smith, J. V., 75-68, 418, 1243, 1913, 3609
 Smith, J. W., 75-422, 1143, 1370, 1776, 3077
 Smith, M. J., 75-1202
 Smith, M. S., 75-805
 Smith, N. L., 75-2233
 Smith, R. H., 75-1276
 Smith, R. T., 75-930, 1981
 Smith, R. W., 75-2077
 Smith, S. J., 75-816
 Smith, T. E., 75-1457
 Smith, T. W., 75-872
 Smith, W. D., 75-3110
 Smith, W. H., 75-1723
 Smolarska, I., 75-940
 Smolin, P. P., 75-656
 Smulikowski, W., 75-1602
 Smykatz-Kloss, W., 75-1810
 Smyslova, I. G., 75-541
 Smyth, J. R., 75-283, 1057, 1254, 2343
 Smythe, D. K., 75-2539
 Snavelly, P. D., Jr., 75-1459
 Snelling, N. J., 75-1515, 2538
 Snethlage, R., 75-3142 (IV.9)
 Snetsinger, K. G., 75-3535, 3570
 Snipes, D. S., 75-375
 Snopko, L., 75-1371
 Snow, R. H., 75-3136
 Snyman, C. P., 75-2612
 Soares de Andrade, A. A., 75-2704
 Sobel, H. L., 75-3093
 Sobolev, V. S., 75-2579
 Sobelli, C., 75-3042
 Sobolev, E. V., 75-878, 1917
 Sobolev, N. V., 75-1293, 2905, 3170, 3474
 Sobolev, V. S., 75-1293, 2905, 3172, 3474
 Soboleva, S. V., 75-155
 Soderblom, L. A., 75-3907
 Sofoulis, J., 75-3643
 Soga, N., 75-3856
 Sohns, H. W., 75-2074
 Sokhor, M. I., 75-3530
 Sokolova, Ye [E.] G., 75-363
 Sokolova, Ye [E.] P., 75-3487
 Soldatov, V. P., 75-272
 Soler, E., 75-908
 Solomon, M., 75-2210
 Solomon, S. C., 75-2783
 Solov'eva, L. P., 75-3020
 Solymár, K., 75-2479
 Sommarvilla, E., 75-3631
 Sommerauer, J., 75-3104
 Sondag, F., 75-3419
 Sonet, J., 75-561, 2808
 Soni, M. K., 75-2621
 Soong, R., 75-3887
 Sorel-Thrierr, A., 75-3193
 Sørensen, H., 75-3582
 Soroka, V. V., 75-298
 Sorokin, Yu. G., 75-1808
 Sorrell, C. A., 75-3201, 3858, 3859
 Souček, J., 75-3517
 Soutar, A., 75-1175
 Souther, J. G., 75-466, 3675
 Sowden, J. M., 75-3032
 Spadea, P., 75-2636
 Spain, I. L., 75-1749
 Spalding, R., 75-2226
 Spangle, L. B., 75-3133
 Sparks, D. M., 75-2668
 Sparks, R. A., 75-1894
 Sparks, R. S. J., 75-2631
 Spears, D. A., 75-392
 Speer, J. A., 75-3515
 Spera, F. J., 75-253
 Sperling, H., 75-934
 Spettel, B., 75-2386
 Spooner, E. T. C., 75-386, 1882
 Spottiswood, D. J., 75-1743
 Springer, G., 75-778, 3501
 Springer, J., 75-2138
 Springer, R. K., 75-653
 Greenivas, B. L., 75-2721
 Srebrodolskiy, B. I., 75-543
 Sridhar, K., 75-95, 2953, 3497
 Srikantia, S. V., 75-665
 Srikrishnan, T., 75-1938
 Srinivasan, J., 75-3435
 Srinivasan, R., 75-1878, 2408, 2721
 Srivastava, O. N., 75-1951
 Srivastava, S., 75-1812
 Srodoń, J., 75-2957
 Staatz, M. H., 75-2215
 Staehli, J. L., 75-3287, 3288
 Stalder, H. A., 75-1330
 Stallard, R. F., 75-1211
 Stamires, D. N., 75-504
 Stanley, D. J., 75-614, 1550
 Stansfield, G., 75-566
 Sapor, F. W., Jr., 75-3813
 Starkey, J., 75-752
 St. Arnaud, R. F., 75-846
 Startsev, V. I., 75-185, 272
 Statham, P. J., 75-775
 Statham, P. M., 75-3321
 Stauffer, P. H., 75-1805, 2775
 Steacy, H. R., 75-3465, 3552, 3594, 3889
 Steck, A., 75-3820
 Steed, G. M., 75-1983
 Steeds, J. W., 75-891
 Steel, R. J., 75-1538
 Steele, I. M., 75-418, 419, 1243
 Steele, T. W., 75-3421
 Steinfeld, A., 75-2243
 Stefansson, K., 75-2981
 Steger, H. F., 75-113
 Steiger, R. H., 75-728
 Steidl, P. F., 75-273
 Stein, V., 75-202
 Steinfink, H., 75-111
 Steinnes, E., 75-38
 Stepanov, A. V., 75-3468, 3580
 Stephan, S., 75-2010
 Stephansson, O., 75-3683
 Stephens, J. F., 75-1025
 Stephenson, J. F., 75-1230
 Stephenson, N. C. N., 75-1474, 1475, 1636
 Stepniewski, M., 75-941
 Sterlenko, Z. V., 75-2741
 Stettler, A., 75-3429
 Stettner, G., 75-1624
 Steven, T. A., 75-743, 962
 Stevens, N. C., 75-3674
 Stevens, R. D., 75-17
 Stevens, R. K., 75-2903 [58]
 Stevenson, D., 75-2748
 Stevenson, P. R., 75-699
 Stewart, A. J., 75-2826
 Stewart, B. V., 75-928
 Stewart, D. B., 75-3142 (V.4)
 Stewart, J. M., 75-3034, 3211, 3564, 3604
 Stillman, C. J., 75-578
 Stinchfield, L., 75-703
 Stinchfield, R., 75-703
 Stinton, D. P., 75-2130
 Stith, D. A., 75-1170
 Stoch, H., 75-762
 Stocklin, J., 75-2903 [64]
 Stoffers, P., 75-1566
 Stöffler, D., 75-1278, 1280, 1281
 Stoiber, R. E., 75-606, 2903 [9], 3749, 3751-3753
 Stojanović, D. R., 75-1306
 Stokke, P. R., 75-2916
 Stollery, G., 75-1640
 Stone, D. B., 75-1668
 Stoneley, R., 75-2903 [65]
 Storey, L. O., 75-551
 Storey, T. P., 75-2055
 Storey, W. C., 75-3431
 Stormer, J. C., Jr., 75-511
 Storzer, D., 75-2832, 3453
 Stoughton, R. W., 75-1125

- Stout, J. H., 75-1649, 3007
 Strangway, D. W., 75-1256
 Stratula, D. S., 75-3737
 Streckeisen, A., 75-661
 Street, R. L. T., 75-3057
 Streif, H., 75-1168
 Strel'tsov, M. I., 75-3647
 Strens, R. G. J., 75-59
 Stride, A. H., 75-608
 Strohschneider, W., 75-1676
 Strogon, P., 75-588, 702
 Strong, D. F., 75-1479, 2627, 3679
 Strübel, G., 75-2052
 Strunz, H., 75-309, 1443, 1445, 2025, 3021
 Stuckenrath, R., 75-1550
 Stuckless, J. S., 75-745
 Studier, M. H., 75-3438
 Stuiiver, M., 75-2302
 Stukas, V., 75-738
 Stul, M. S., 75-1827
 Stumpf, E. F., 75-191, 1745, 2041, 2533
 Stupnikov, V. A., 75-1748
 Sturgeon, R. E., 75-767
 Sturm, M., 75-2857
 Sturman, B. D., 75-3565, 3602
 Sturrock, R. F., 75-721
 Stussi, J.-M., 75-3346
 Subrahmanyam, B., 75-569
 Sudarsanan, K., 75-179
 Suddaby, P., 75-2611
 Sudo, T., 75-817, 1575, 1811, 1864, 2436, 2951, 3012, 3585
 Suensilpong, S., 75-2041
 Suess, E., 75-366
 Suffolk, G. C. J., 75-3912
 Sugaki, A., 75-30, 54, 55, 526, 531, 532, 533
 Suito, K., 75-3302
 Suk, M., 75-2709
 Sukharev, G. M., 75-2741
 Summerhayes, C. P., 75-1000
 Summerson, C. D., 75-761
 Summons, R. E., 75-2380
 Sun, C.-O., 75-1159
 Sun, S.-S., 75-1159
 Sun, T.-P., 75-3128
 Sunada, T., 75-1784
 Sunagawa, I., 75-3265
 Sundar Rao, P. N., 75-1817
 Sundby, B., 75-1194, 1586
 Sung, C.-M., 75-1008
 Supajanya, T., 75-2851
 Supko, P. R., 75-3761
 Suppe, J., 75-1644, 1726
 Suprychev, V. A., 75-506, 535
 Suquet, H., 75-2940
 Sureau, J.-F., 75-3142 (IV.10)
 Surkov, Yu. A., 75-3327
 Suryanarayana, K. V., 75-568
 Suslov, G. I., 75-25
 Süss, P., 75-2420, 3044
 Sutherland, D. S., 75-3732
 Sutherland, J. M., 75-3325
 Sutton, J., 75-2583
 Suvorov, A. I., 75-3839
 Suzuki, Y., 75-1795
 Svare, I., 75-1139
 Sveshnikova, E. V., 75-460
 Svetlichnaya, N. A., 75-2822
 Sviridenko, V. T., 75-3680
 Sviridov, V. V., 75-592
 Swanson, D. A., 75-3740
 Sweeney, R. E., 75-1036
 Sweet, P. C., 75-1684
 Swenson, D. H., 75-3710
 Swift, D. J. P., 75-2903 [10]
 Swindale, L. D., 75-2971
 Switsur, V. R., 75-14
 Sylvester, K. A., 75-1664
 Sykes, J., 75-2735
 Symons, D. T. A., 75-696, 1665, 3675
 Syneček, V., 75-3038, 3599
 Syono, Y., 75-2131, 3010
 Syvret, J. N., 75-219
 Szadeczky-Kardoss, E., 75-2159
 Szóder, Gy., 75-2633
 Szpila, K., 75-836, 837
 Szymański, J. T., 75-1931, 1932, 3211
 Tadini, C., 75-3051, 3061
 Taff, L. G., 75-3913
 Tai, F.-F., 75-1998, 3566
 Tait, J. M., 75-158
 Takagi, H., 75-87
 Takahashi, H., 75-1839
 Takahashi, T., 75-262, 302, 681, 685
 Takeda, H., 75-2131
 Takeshi, H., 75-131
 Takeuchi, T., 75-1795
 Takeuchi, V., 75-873
 Takeuchi, Y., 75-859, 1891, 3009, 3059
 Taki, M., 75-1793
 Talwani, M., 75-2903 [26]
 Tamhankar, R. V., 75-1026
 Tammemagi, H. Y., 75-2233, 3866
 Tan, F. C., 75-376, 2221
 Tanaka, T., 75-3442
 Tanelli, G., 75-1361
 Tanguy, J.-C., 75-3722
 Taniguchi, T., 75-1841
 Taraghdar, D. K., 75-1960
 Tardy, Y., 75-1063, 2934, 2935
 Tareen, J. A. K., 75-484, 521, 2408
 Tarkian, M., 75-1745, 2533
 Tarlakov, Yu. P., 75-1066
 Tarling, D. H., 75-905, 906, 3892
 Tarney, J., 75-2289
 Tarte, P., 75-1845
 Tasch, P., 75-2282
 Tatarinov, A. V., 75-567
 Tateyama, H., 75-3012
 Tatlock, G. J., 75-891
 Tatsumi, T., 75-584
 Tatsumoto, M., 75-3430
 Tavares, A. Freitas, 75-2968
 Taylor, C. M., 75-527
 Taylor, D., 75-1965, 3300
 Taylor, D. S., 75-3134
 Taylor, G. R., 75-955
 Taylor, H. F. W., 75-3480
 Taylor, H. K., 75-62
 Taylor, H. P., Jr., 75-1193, 2208, 2288, 3395
 Taylor, K. A., 75-1884
 Taylor, P. N., 75-725
 Taylor, P. R., 75-1048
 Taylor, R., 75-766, 2190
 Taylor, S. R., 75-382, 2350
 Tazaki, K., 75-288
 Tazzoli, V., 75-3017, 3052
 Tchalenko, J. S., 75-1422
 Tchmichkian, G., 75-1348
 Tchoua, F., 75-3698
 Tchoubar, C., 75-1825, 1905
 Teleshova, R. L., 75-1632, 2713
 Tellgren, R., 75-1941, 1942
 Temnikov, Yu. I., 75-3696
 Tempelman-Kluit, D. J., 75-2556
 Tennissen, A. C., 75-2490
 Tenyakov, V. A., 75-3337
 Teodorovich, G. I., 75-1860
 Terent'yeva, M. V., 75-3487
 Ter Heege, J. P., 75-3291
 Terlecky, P. M., Jr., 75-3806
 Ter-Stepanian, G., 75-3780
 Tetley, N. W., 75-2340
 Tetttenhorst, R., 75-1835
 Thein, U. M., 75-3844
 Theodore, T. G., 75-1232
 Theron, A. C., 75-1268
 Thiede, J., 75-1555
 Thihe, U., 75-3107
 Thomas, A., 75-2883
 Thomas, A. D., 75-1830
 Thomas, C. P., 75-2897
 Thomas, J., Jr., 75-84
 Thomas, J. N., 75-175
 Thomas, J. O., 75-1941, 1942
 Thomas, L. P., 75-619
 Thomas, R. H., 75-720
 Thomas, R. L., 75-1587
 Thomas, T. L., 75-62
 Thompson, A. B., 75-2081
 Thompson, C. H., 75-1874
 Thompson, C. L., 75-3428
 Thompson, R., 75-2749
 Thompson, R. N., 75-284, 2244, 3177
 Thompson, R. R., 75-2668
 Thompson, T. D., 75-109, 368
 Thomsen, B., 75-2655
 Thomson, A. P., 75-2943
 Thomson, I., 75-2328
 Thomssen, R. W., 75-2531
 Thorez, J., 75-830, 1845
 Thornber, M. R., 75-882, 3332, 3333
 Thorpe, R. I., 75-3115, 3600
 Thorpe, R. S., 75-1498, 3400
 Thorpe, T. E., 75-3919
 Thrierr-Sorel, A., 75-3046
 Thunell, R. C., 75-3762
 Thurrell, R. G., 75-197, 2657
 Tieh, T. T., 75-1164, 3811
 Tien, P., 75-2516
 Tien, P.-L., 75-793
 Tikhomirov, V. G., 75-3633
 Till, R., 75-69
 Tiller, K. G., 75-2133
 Tilling, R. I., 75-2236
 Timperley, M. H., 75-2266
 Tinsley, J., 75-2907 (3)
 Titley, S. R., 75-3067
 Tittle, K., 75-917
 Tobschall, H. J., 75-1317
 Togashi, Y., 75-476, 3598
 Tokarev, P. I., 75-3736
 Tokonami, M., 75-145, 2131
 Toksöz, M. N., 75-2351, 2787
 Tolstikhin, I. N., 75-317, 1138, 3414
 Toman, K., 75-1048
 Tomas, J. R., 75-3615
 Tomblin, J. F., 75-1519
 Toner, L., 75-2888
 Tomida, Y., 75-1781, 1782
 Tomita, K., 75-89, 799, 1866
 Tomor, E., 75-2159
 Tombs, J. M. C., 75-2545
 Tomschey, O., 75-2143, 2159
 Tonschhoff, H. K., 75-22
 Tooms, J. S., 75-1567, 1571, 1572, 1573, 1574
 Toon, O. B., 75-3862
 Toots, H., 75-1134
 Top, Z., 75-426
 Toriumi, M., 75-457
 Torkelson, B. E., 75-1738
 Torquato, J. R., 75-6
 Torske, T., 75-2171
 Tossell, J. A., 75-855, 881
 Tosson, S., 75-974
 Toulmin, P., III, 75-3901
 Touray, J.-C., 75-727, 1142
 Tourenq, J., 75-2901
 Tourlet, J., 75-561
 Towe, K. M., 75-1815
 Tracy, R. J., 75-2417
 Tranqui, 75-1949
 Tran-Vinh-An, 75-847
 Traub, I., 75-3311
 Traub, W. A., 75-2374
 Trdlička, Z., 75-2502
 Treagus, J. E., 75-3827
 Trembath, L. T., 75-740, 132
 Tremblay, R. J., 75-3008
 Trendall, A. F., 75-1977, 2011, 2827, 3706
 Trescases, J.-J., 75-2935
 Tresham, A. E., 75-2185, 253
 Treuil, M., 75-3730
 Triché, C., 75-3476
 Trichet, J., 75-2963, 3142 (IV.8)
 Trifonov, V. G., 75-3432
 Triodina, N. S., 75-2733
 Tripp, R. B., 75-3097
 Trivedi, J. M., 75-689, 691
 Trofimuk, A. An., 75-1559
 Troll, G., 75-1626
 Trombe, J.-C., 75-3053, 3141
 Trommsdorff, V., 75-1611, 27
 Trucco, R., 75-2890
 Truesdell, A. H., 75-398, 399, 400, 3182
 Truswell, J. F., 75-1557
 Tsai, P.-C., 75-377
 Tsay, F.-D., 75-2360
 Tschoop, D. G., 75-273
 Tsinober, L. I., 75-3298
 Tsubota, H., 75-2309
 Tsukuma, K., 75-3033
 Tsunashina, A., 75-368
 Tsyganov, E. M., 75-3298
 Tucholke, B. E., 75-2922
 Tucker, J. D., 75-501
 Tucker, J. H., 75-1201
 Tucker, R., 75-3909
 Tugarinov, A. I., 75-3861
 Tullis, J., 75-2446
 Tullock, R. J., 75-1823, 2931
 Tunell, G., 75-1039
 Tung, C.-H., 75-2481
 Tupkary, R. H., 75-2098
 Turchenek, L. W., 75-846
 Turchenko, T. L., 75-541
 Turco, G., 75-756, 1009, 1052, 1287, 2134, 3142 (IV.6, 7), 3454, 3494
 Turcotte, D. L., 75-1621, 2747
 Turcotte, G., 75-759
 Turek, A., 75-2340
 Turekian, K. K., 75-381, 2310
 Turley, T. J., 75-717
 Turner, D. C., 75-2067
 Turner, F. J., 75-57
 Turner, G., 75-1246
 Turner, P., 75-3892
 Turner, T. L., 75-753
 Turnock, A. C., 75-2147
 Turpetko, S. A., 75-1363
 Tuzova, T. V., 75-2822
 Uchikawa, H., 75-1784
 Udagawa, S., 75-293, 2152, 2157, 2158

- Jvski, E., 75-2118
 J. S., 75-2161
 J. F. C., 75-135
 J. D. R., 75-423, 2170
 J. K. S., 75-216
 J. G. C., 75-2474
 J. Y., 75-292
 J. L., 75-3017
 J. Y., 75-131
 J. D. M., 75-3430
 J. K., 75-94, 293, 2152, 1157
 J. T., 75-1999
 J. H. C., 75-1284
 J. C. M., 75-2903 [12, 33]
 J. K. V., 75-3538
 J. V. S., 75-3142 (II.10)
 J. P. V., 75-1341, 1357
 J. E. I., 75-1394
 J. M., 75-121, 502, 649
 J. S., 75-2630, 2903 [34]
 J. S., 75-2918
 J. M., 75-2820, 2821
 J. W., 75-3250
 J. P. R., 75-2903 [18]
 J. M. I., 75-205
 J. A. A., 75-3410
 J. S., 75-3366
 J. K. S., 75-1812
 J. M. J., 75-1578
 J. S., 75-999
 J. P., 75-2903 [22]
 J. I., 75-2008
 J. T. G., 75-450, 658, 432
 J. E. R., 75-1006
 J. S., 75-2685
 J. O., 75-1700, 2818, 2923, 2924
 J. P. C., 75-640
 J. W. J. M., 75-1221
 J. B., 75-2413
 J. B., 75-370
 J. Z., 75-3305, 3306
 J. M. V., 75-206
 J. W. C. J., 75-192
 J. S., 75-2914
 J. H., 75-2726
 J. T., 75-1135
 J. S., 75-2876
 J. T., 75-2164, 3730
 J. M., 75-2727
 J. H., 75-2805
 J. G., 75-689
 J. Y. R., 75-2580
 J. D. J., 75-855, 881, 886
 J. M., 75-1610
 J. I., 75-3343
 J. V. A., 75-1908
 J. F., 75-1270
 J. C., 75-1881
 J. J., 75-1426, 2903 [44]
 J. A., 75-797
 J., 75-1197, 3381, 3393
 J. Z., 75-2707
 J. D., 75-965
 J. B., 75-2438
 J. Danielle, 75-3666
 J. T. A., 75-228, 1354
 J. D., 75-2969
 J. V. V., 75-2580
 J. M., 75-2574
 J. I., 75-968
 J. R., 75-2114
 Venkataratham, K., 75-1569
 Venkatesh, C. G., 75-1952
 Venturelli, G., 75-1224, 1441, 1494
 Vereshchagin, L. F., 75-1748
 Verhoogen, J., 75-57
 Verma, R. K., 75-1669
 Verma, V. K., 75-1812
 Vernhet, S., 75-2862
 Vernia, L., 75-1495
 Vernon, R. H., 75-280
 Veselovský, F., 75-3461
 Vető, I., 75-2279
 Veverka, J., 75-1695, 3436, 3909, 3911
 Viaene, W., 75-908, 2108
 Vialon, P., 75-1622
 Vianello, G., 75-2253, 2269, 2635
 Vicat, J., 75-1949
 Vidal, P., 75-2811
 Vidale, R. J., 75-3850
 Viechnicki, D., 75-2097
 Vila, J.-M., 75-3666
 Vilks, G., 75-1221, 3391
 Villalon, M., 75-62
 Vil'sov, L. N., 75-534
 Vincent, E. A., 75-2234, 2235
 Vinogradov, A. P., 75-3327
 Vinogradov, V. I., 75-1121
 Vinogradova, R. A., 75-529
 Vishnevskii, S. A., 75-3450
 Viswanathiah, M. N., 75-360, 484, 521, 1997, 2030
 Visibelli, D., 75-772
 Visse, L. D., 75-3140
 Viswanathan, K., 75-2211
 Viswanathan, S., 75-46, 473, 481, 538, 597, 1423, 2285
 Vitovskaya, I. V., 75-486
 Vlek, P. L. G., 75-2927
 Vlisidis, A. C., 75-1381
 Vogt, P. R., 75-3763
 Vokes, F. M., 75-2501
 Vokhmentsev, A. Ya., 75-489
 Volborth, A., 75-2356
 Volkov, S. A., 75-758
 Voll, G., 75-3826
 Vologdin, A. G., 75-2206
 von Huene, R., 75-2903 [15]
 von Knorring, O., 75-2476, 3586, 3601
 Von Raumer, J. F., 75-1615
 Voronkov, A. A., 75-556, 1392, 1888, 3006
 Voskresenskaya, I. E., 75-278
 Vovk, P. K., 75-1382
 Voytov, G. I., 75-3416
 Vozár, J., 75-1444
 Vrublevskaya, Z. V., 75-2989
 Vuagnat, M., 75-1614
 Vujanovic, V., 75-1990
 Vuorelainen, Y., 75-3597
 Vyal'sov, L. N., 75-529, 539, 558
 Vyas, S. N., 75-2114
 Vynar, O. N., 75-1382
 Vysokroostrovskaya, E. B., 75-314
 Wachendorf, H., 75-3703
 Waddington, D. H., 75-1640
 Wadge, A. J., 75-2540
 Wagle, B. G., 75-583
 Wagner, C. W., 75-1554
 Wagner, G. A., 75-1281
 Wahlberg, J. S., 75-2215
 Wai, C. M., 75-1013
 Wakeham, S., 75-373
 Wakhaloo, S. N., 75-2717
 Wakita, H., 75-1276
 Walden, J., 75-3130
 Walenta, K., 75-935, 1985, 2022, 2505
 Walker, G. P. L., 75-1487, 1489, 2631
 Walker, R. L., 75-737
 Walker, R. M., 75-1124
 Walker, W. J., 75-1130
 Wallace, J. H., 75-1617
 Wallace, R. C., 75-3472
 Walsh, D., 75-3142 (II.3)
 Walter, L. S., 75-435
 Walter, M. R., 75-3576
 Walters, D. S., 75-3026
 Walton, G. G., 75-2903 [18]
 Wamsteker, W., 75-2780
 Wan, C., 75-144, 180, 184
 Wan, H. M., 75-792
 Wang, C.-Y., 75-1634, 1654
 Wang, K.-H., 75-3566
 Wang, N., 75-2107, 2108, 3214, 3217
 Wang, P.-C., 75-2403
 Wang Lee, C. M., 75-1234
 Wanke, H., 75-2386
 Wanless, R. K., 75-17, 2838, 2840
 Wannemacher, J., 75-1291
 Ward, F., 75-709
 Ward, P. L., 75-3754
 Wardlaw, N. C., 75-2128
 Ware, N. G., 75-774, 2577
 Warkentin, B. P., 75-2973
 Warner, J., 75-1254
 Warner, R. D., 75-3169
 Warren, R. G., 75-1276
 Warren, P. L., 75-1777
 Waskett-Myers, M. J., 75-1765
 Wasserburg, G. J., 75-3444
 Wasson, J. T., 75-70
 Watanabe, M., 75-145
 Watanabe, Y., 75-162, 1843
 Watkins, N. D., 75-729, 2831
 Watkinson, D. H., 75-3596
 Watling, R. J., 75-765
 Watmuff, I. G., 75-2495
 Watson, A. E., 75-771
 Watson, D., 75-62
 Watson, J., 75-2911
 Watterson, J. R., 75-2878
 Watts, A. B., 75-1436
 Watts, B. J., 75-247
 Watts, D. R., 75-3797
 Watts, R. P., 75-3890
 Watznauer, A., 75-2813
 Weaver, C. E., 75-3524
 Weaver, F. M., 75-638
 Weaver, S. D., 75-1499, 3732
 Webb, J. S., 75-1225
 Weber, F., 75-1172, 1852
 Weber, J., 75-790
 Weber, J. N., 75-3383
 Weber, K., 75-776
 Weber, W., 75-1230
 Weber-Diefenbach, K., 75-3142 (IV.9)
 Webster, R., 75-307, 1100, 1117, 3320
 Wedde, M., 75-170
 Wedden, D., 75-2697
 Wedepohl, K. H., 75-1813
 Weed, S. B., 75-2919
 Weeks, L. G., 75-2903 [69]
 Weeks, R. A., 75-1886, 3855
 Weibel, M., 75-3313
 Weiblen, P. W., 75-1242
 Weichman, B., 75-2072
 Weidner, J. R., 75-2122
 Weil, J. L., 75-1124
 Weill, D., 75-2149
 Weill, D. F., 75-2088
 Weir, A. H., 75-829
 Weir, J. A., 75-1405
 Weisbrod, A., 75-3142 (IV.5)
 Weisbrod, A. M., 75-1330
 Weisenburger, S., 75-2734
 Weiss, A., 75-1809
 Weiss, H., 75-2296
 Weiss, K., 75-937
 Weissbrod, T., 75-1858
 Weitzel, H., 75-169
 Welin, E., 75-2803
 Wellman, P., 75-732, 1716
 Wells, K., 75-1454
 Welter, C. C., 75-224
 Welters, B. L., 75-1074
 Wenginger, H., 75-1680, 1681
 Wenk, E., 75-661, 1617
 Wenk, G. J., 75-2896
 Wenk, H.-R., 75-1617, 1618, 3230
 Wenner, D. B., 75-1193, 3395
 Wenzel, J., 75-2996
 Werner, H.-D., 75-263
 Werner, W. G., 75-3808
 West, G. W., 75-142
 West, I., 75-3569
 West, M., 75-2792
 West, R. A., 75-3907
 Westercamp, D., 75-2843
 Westhusing, J. K., 75-3743
 Wetherill, G. W., 75-1244
 Wetmiller, R. J., 75-1666
 Wey, R., 75-3281, 3282, 3299
 Weymouth, J. W., 75-3063
 Whalley, H. A., 75-2543
 Wheatley, C. J. V., 75-1982
 Whelan, T., III, 75-3390
 Whipple, E. R., 75-1756
 Whitaker, A., 75-3057
 Whitaker, W. G., 75-954
 White, A. H., 75-1916, 1944
 White, D. E., 75-138, 398, 964
 White, E. W., 75-1785
 White, G., 75-775
 White, J. L., 75-1824
 White, J. S., Jr., 75-507
 White, S., 75-924, 1339, 2456, 3827
 White, W. B., 75-59, 2104
 Whitehead, A. B., 75-2789
 Whitford-Stark, J. L., 75-2362
 Whitlatch, R. B., 75-2884
 Whittaker, A., 75-2656
 Whitten, E. H. T., 75-3350
 Whittington, R., 75-3622
 Whittow, J. B., 75-2915
 Whyte, F., 75-1439
 Wichrowska, M., 75-472
 Wichrowski, Z., 75-335, 336
 Wick, G. L., 75-2377
 Widmark, E. T., 75-1061
 Wiebe, R. A., 75-3355
 Wiedenschilling, S. J., 75-2198
 Wiederhorn, S. M., 75-2736
 Wielemaker, W. G., 75-2923, 2924
 Wielomas, L., 75-941
 Wiener, L. S., 75-960
 Wiese, R. G., Jr., 75-1150
 Wieser, T., 75-2410
 Wiewióra, A., 75-85, 1833, 1849
 Wilband, J. T., 75-2891
 Wilde, P., 75-3226
 Wilding, L. P., 75-815, 827, 2846
 Wilhelms, D. E., 75-2788
 Wilk, A., 75-2967
 Wilk, H., 75-309, 1445, 2025, 3021

- Wilkening, L. L., 75-427
 Wilkes, P., 75-71
 Wilkins, R. W. T., 75-142
 Wilkinson, J. F. G., 75-572, 1432, 3705
 Wilkinson, J. G., 75-639
 Wilkinson, L. R., 75-2896
 Wilks, E. M., 75-3853
 Wilks, J., 75-1021, 3853
 Willaime, C., 75-157, 682
 Williams, B. J., 75-2656
 Williams, C. A., 75-695
 Williams, D. G., 75-103
 Williams, H., 75-2903 [58]
 Williams, I. R., 75-3644
 Williams, R. J., 75-1159, 3144
 Williams, S. A., 75-549, 3593, 3595, 3606
 Williamson, D. R., 75-62
 Willis, B. T. M., 75-189
 Willkomm, H., 75-366
 Wilshire, H. G., 75-1283, 3422
 Wilson, A. C., 75-1538
 Wilson, A. F., 75-2722
 Wilson, C. J. L., 75-3111
 Wilson, D. M., 75-1187
 Wilson, I. G., 75-1532
 Wilson, I. R., 75-3352
 Wilson, H. E., 75-1975
 Wilson, J. D., 75-2017
 Wilson, J. F., 75-731, 1713
 Wilson, J. R., 75-2610
 Wilson, J. T., 75-2641
 Wilson, M. J., 75-158
 Wilson, M. R., 75-929, 2801
 Wilson, W. E., 75-231, 1737
 Wilt, J. C., 75-963
 Wimmenauer, W., 75-3356
 Win, U. S., 75-3106, 3844
 Winchester, J. A., 75-451, 1403
 Windley, B. F., 75-735, 3608, 3609
 Windom, H., 75-1551
 Winkler, H. G. F., 75-1814
 Winnall, N. J., 75-731
 Winnock, E., 75-2903 [24]
 Wintle, A. G., 75-2732
 Winzer, S. R., 75-3427
 Wintsch, R. P., 75-3283
 Wirsching, U., 75-301, 2181
 Wirtz, G. P., 75-3026, 3028
 Wise, D. V., 75-2903 [4]
 Wise, S. W., Jr., 75-638
 Witkind, I. J., 75-1458
 Wittig, R., 75-3669
 Wittmann, H., 75-773
 Wocklawek, T., 75-2918
 Woermann, E., 75-1022
 Woinski, J., 75-625
 Wolcott, D. K., 75-2873
 Wolf, K. H., 75-1533
 Wolfe, C. W., 75-1044, 1812
 Wolfe, R. W., 75-156, 1904
 Wolfe, W. J., 75-2326
 Wolff, R. G., 75-1590
 Wolhuter, L. E., 75-3359, 3708
 Wollenberg, H. A., 75-374
 Wones, D. R., 75-3711
 Wong, H. K. T., 75-2280
 Wood, B. J., 75-281, 3142 (IV.4)
 Wood, C. A., 75-3433
 Wood, C. P., 75-2488
 Wood, M. M., 75-1928
 Woodruff, D. P., 75-72
 Woodward, A. C., 75-678
 Woollacott, L. C., 75-2090
 Woolley, A. R., 75-2805
 Worzel, J. L., 75-2903 [5]
 Wright, A. C., 75-28
 Wright, A. E., 75-2289
 Wright, A. F., 75-872
 Wright, J. B., 75-73, 1419, 1490, 1512, 3668
 Wright, P. L., 75-1169
 Wright, T. L., 75-3142 (V.4), 3740
 Wróblewski, T., 75-1988
 Wu, D. C., 75-844, 845
 Wuensch, B. J., 75-1933
 Wunder, S. J., 75-1688
 Würzburger, U., 75-908
 Wybraniec, S., 75-196
 Wyllie, P. J., 75-1017, 1067, 2094, 2117, 2148, 3258, 3267, 3286
 Wyricki, R., 75-837
 Wyrwicka, K., 75-626
 Wyrwicki, R., 75-1849
 Yaalon, D. H., 75-1829
 Yagi, K., 75-466, 3172
 Yagi, S., 75-327
 Yagi, T., 75-276
 Yaguchi, K., 75-1768
 Yakovleva, M. Ye. [E], 75-1099
 Yakovleva, S. S., 75-317
 Yalovenko, I. P., 75-944
 Yamada, H., 75-94
 Yamaguchi, N., 75-1774
 Yamamoto, T., 75-859, 1891
 Yamaoka, S., 75-3197, 3198
 Yamauchi, Y., 75-3265
 Yamazaki, T., 75-3734
 Yamazaki, Y., 75-1795
 Yamnova, N. A., 75-3060
 Yang, C.-W., 75-334
 Yang, H.-Y., 75-1275, 2145, 3257
 Yang, M.-C., 75-1998, 3566
 Yao, T.-Y., 75-334
 Yapaudjian, L., 75-614
 Yarenskaya, M. A., 75-1359
 Yariv, S., 75-2938, 3013
 Yashina, R. S., 75-486
 Yasyerev, A. P., 75-2321
 Yatsenko, G. M., 75-664
 Yea, D.-N., 75-3240
 Yeeming, T. Wu, 75-2750
 Yeend, W. E., 75-2007, 3146
 Yeh, C.-H., 75-2920
 Yeh, D.-N., 75-688, 1651
 Yemel'yanov, Ye [E]. M., 75-343
 Yemlin, E. F., 75-680
 Yen, T. P., 75-950, 3845
 Yeremenko, G. K., 75-1075
 Yeremin [Eremin], N. I., 75-1355
 Yesmov, B. O., 75-947
 Yim, W. W.-S., 75-2880
 Yoder, H. S., Jr., 75-3252
 Yong, R. N., 75-1831
 Yonge, C. J., 75-1246
 Yoon, H. S., 75-683
 Yoro, A., 75-831, 2960
 Yoshida, M., 75-29, 1757, 3598
 Yoshida, S., 75-1757, 1761
 Yoshida, T., 75-79, 1838
 Yoshida, Y., 75-1732
 Yoshii, M., 75-476
 Yoshikawa, S., 75-1818
 Youell, R. F., 75-3080
 Young, B. R., 75-2185
 Young, D. G. G., 75-3623
 Young, D. R., 75-1175
 Young, J. E., Jr., 75-2103
 Young, R. A., 75-179
 Young, R. C., 75-3272
 Young, R. S., 75-74
 Yu, C.-A., 75-2403
 Yu, R. M., 75-305
 Yu, T.-H., 75-2522
 Yu, T.-M., 75-2032
 Yui, S., 75-530
 Yun, S., 75-238
 Yund, R. W., 75-2165
 Yung, K.-H., 75-377
 Yunikov, B. A., 75-1322
 Yunov, A. Y., 75-1501
 Yurkina, K. V., 75-556
 Yushkin, N. P., 75-542
 Yushko-Zakharova, O. Ye [E]., 75-3533
 Zabiya, I. D., 75-2398
 Zagorčev, I. S., 75-1415
 Zajac, I. S., 75-221
 Zák, L., 75-3599
 Zakrzewski, M., 75-3578
 Zakrzhevskaya, I. V., 75-1156
 Zambrano, J. J., 75-2903 [33]
 Zanazzi, P. F., 75-3042
 Zanyukov, V. N., 75-3648
 Zanzari, A. R., 75-3042
 Zaritskiy, P. V., 75-1531
 Zasedatelev, A. M., 75-1861
 Zeck, H. P., 75-660
 Zeda, O., 75-1292
 Zeitman, B., 75-2380
 Zelichowski, A., 75-1851
 Zellmer, D. L., 75-1276
 Zellner, B. H., 75-3910
 Zen, E.-An., 75-1642, 2079, 2868
 Zenger, D. H., 75-3572
 Zenk, W., 75-1691
 Zerbi, M., 75-1441, 1492, 1493
 Zharikov, V. A., 75-1060
 Zharkova, T. M., 75-2066
 Zhdanova, T. A., 75-1888
 Zheng, X.-Z., 75-1055
 Zhong, J.-Y., 75-1425
 Zhou, Y.-P., 75-1184
 Zhouchilistov, A. P., 75-155
 Zhukhovitskaya, A. L., 75-367
 Zhukovskii, Yu. K., 75-1748
 Zidarov, N., 75-1368
 Zielinski, R. A., 75-286
 Zietek-Kruszewska, A., 75-970
 Zil'bershtein, A. Kh., 75-25
 Zimmermann, H., 75-857
 Zimmermann, R. A., 75-623, 987
 Zinger, A. S., 75-405
 Zinnow, K. P., 75-26
 Zirpoli, G., 75-2425, 3832
 Zlenko, B. F., 75-947
 Znamenskiy, V. S., 75-528
 Zodrow, E., 75-1729
 Zoller, W. H., 75-3413
 Zolotarev, V. N., 75-206
 Zoltai, T., 75-3009
 Zook, T. F., 75-2186
 Zouestigh, N., 75-98
 Zubayrayev, S. L., 75-383
 Zubkov, S. I., 75-3735
 Zubova, E. V., 75-1748
 Zucchetti, S., 75-1360
 Zuffa, G. G., 75-1771
 Zuyev, V. A., 75-448
 Zvyagin, B. B., 75-155, 2989
 Zwaan, P. C., 75-1103

SUBJECT INDEX

Mineralogical Abstracts, vol. 26. Names of REGIONS are printed in capitals. Subjects in lower-case roman, and localities in italics.

Deenshire v. Scotland
 X-ray spectra, of chrome-diopside, 5-2727
Dhabi v. Trucial states
 Cumalite, USSR, 75-212
 Anthite, comparison with aguilairite & cumannite, 75-3564; *Colorado*, 75-223; *Canada*, 75-1148
 Calc anhydride, reaction with halloysite, 75-87
I. v. Ireland
 Anthite v. pyroxene
 Anthite v. amphibole
 Activity coefficients, calculation, 75-1010
 Anorthite, *Western Australia*, petrol. of
 Autons, 75-1474, 1475; *New South Wales*, 75-1432; *Labrador*, pyroxene-olivine-quartz assemblages in, 75-602
 N, opaque minerals in Tertiary volcanic rocks, 75-1349
 Anorthite v. feldspar
 EAN SEA, palaeomagnetism of cores, 75-2753; *Alonnisos & Peristera I.*, geol. structure, 75-3633; *Leros I.*, alkali amphiboles, 75-467
 Anorthite v. Greece
 Anthite v. pyroxene
 Anthite, structure, 75-875; order-disorder, 75-150; related to krinovite, 75-1899; related to serendibite, 75-2420; *N-W Africa*, in silica-undersaturated rocks, 75-3481; *British Columbia*, in peralkaline rocks, 75-466
Canary Is., Sicily v. Italy
 Anthite, gamma-ray spectra, 75-3549
 Anthite, *China*, new variety, anal., opt., X-ray, 75-1352
 Anthite, nioboeschynite-(Ce), *Alaska*, non-metamict, opt., X-ray, 75-3550
 GHANISTAN, spodumenes, 75-3476;
¹⁴C dating of calcification periods, 75-2799; *Nuristan*, gem spodumene & schroite tourmaline, 75-1095; *Oxus R.*, lapis-lazuli, 75-3316; *Sar e Sang*, peraluminous sapphirine, 75-3462
 CANADA, granulites and related rocks, 75-3837; rift type alkalic rocks, 75-596; metamorphic facies series, 75-3836; red and green grossular, 75-1087; cookeite in petalite, 75-478; gaseous inclusions in diamond, 75-510; biotite inclusions in diamond, 75-511; *Atlantic margin*, ancient metamorphic-migmatite belts, 75-1420; *W.*, sampling alluvial diamond deposits, 75-62; *S-W shelf*, phosphate concentrations in sediments, 75-362; *southern*, Late Precambrian glaciogenic sedimentary rocks, 75-3796; silcretes and silica diagenesis, 75-3799; *W.*, continental slope construction and destruction, 75-2903 [13]; *E.*, continental margin, 75-2903 [23]; *N.E.*, heat flow and heat production, 75-3866; *Sahara*, glacial deposits and evidence of permafrost, 75-614
 Anthite, staining, 75-308; *South Africa*, 75-704; *California*, fire agate, 75-2194; *Montana*, moss agate, 75-2193; *Oregon*, blue, 75-2191; 'thunder eggs', etc., 75-2192; *South Dakota*, 75-711

Age determination, spurious K/Ar ages, 75-724; evaluation of K/Ar methods, 75-723; ⁴⁰Ar/³⁹Ar spectra of undisturbed terrestrial samples, 75-1; effect of rock crushing on K/Ar dating, 75-1698; granites by K/Ar method, 75-2798; Precambrian banded iron-formations, 75-1721; K/Ar dating of gamma-irradiated minerals, 75-1697; radiocarbon dating of carbonate concretions, 75-2804; phosphatic nodules in marine shelf sediments, 75-2830; ¹⁴C dating of deep-sea sediments, 75-1528; Apollo 14 breccias, 75-421; lunar breccias, 75-1237; lunar spinel-troctolite and basalt, 75-1244; *England*, Cross Fell inlier, 75-1701; *Cornwall/Devon*, Upper Palaeozoic volcanics, 75-2806; *Leicestershire*, igneous rocks, 75-726; *North Yorkshire*, Pennine granites, 75-3686; *Cumbria*, Lake District mineral localities, 75-1702; *Wales*, K/Ar ages from five localities, 75-1703; *Scotland*, Lewisian metasediments and gneisses, 75-1700; *Outer Hebrides*, grey gneiss complex, 75-725; *Ireland*, bibliog., 75-2807; granodiorite, 75-2808; *France*, Eocene volcanic rocks, 75-1704; Triassic rocks, 75-2812; gneissic diorite, 75-2811; Permian rhyolites, ignimbrites, dolerites, 75-2810; basaltic eruptions, 75-2809; Palaeozoic sediments, 75-2; fluorite, 75-727; *Germany*, basalts, 75-1706; granites, 75-1707, 1708; hornblende syenite, 75-2238; *Western Alps*, blue amphiboles, micas, and associated minerals, 75-3; *Swiss Alps*, polymetamorphic terrain, 75-728; *Portugal*, basaltic complex, 75-1705; *Sardinia*, intrusive rocks, 75-1709; *Czechoslovakia*, granulites, 75-2813; *Norway*, Precambrian and Palaeozoic rocks, 75-1699; granite plutons, Rb/Sr isochrons, 75-2800; metamorphic and magmatic rocks, granodiorite, trondhjemitic, 75-561; *Finland*, carbonate, 75-2805; *Sweden*, basalt neck, 75-2802; deformation in Caledonides, 75-2801; *Rockall I.*, granites, 75-2538; *Rockall Bank*, rocks from, 75-1514, 1515; *Helen's Reef*, microgabbro, 75-2538; *Mid-Atlantic Valley* basalts, 75-2832; *Canary Is.*, 75-2831; igneous rocks, 75-729; USSR, Precambrian basement rocks, 75-7; Palaeogene basalts, 75-8; Precambrian granulites, 75-2824; Ni-Co mineralization, 75-2825; age of *Lake Balkhash*, 75-2822; *Russian SFSR*, epithermal fluoride deposits, 75-2823; *Israel*, Hazeva formation sediments, 75-1715; *Mongolia*, Permian-Triassic volcanic rocks, 75-9; *China*, magmatic and metamorphic rocks, 75-15; *India*, buried soil, 75-14; Dalhousie granite, 75-13; fission track ages of Bundelkhand granites, 75-12; *Deccan Traps*, lavas, 75-11; muscovites, 75-1812; *Angola*, Rb/Sr geochron. of granitic rocks, 75-6; *Egypt*, basaltic rocks, 75-1711; nepheline syenite ring complexes, 75-1712;

Ivory Coast, granites, 75-2817; *Libya*, basaltic volcanic Cainozoic rocks, 75-730; *Malawi*, gneisses and syenites, 75-663; *Mauretania*, *Morocco*, metamorphosed and unmetamorphosed series, 75-614; *Morocco*, granites, 75-2814; dolerites, 75-2815; Precambrian rocks, 75-2816; *Rhodesia*, granites, 75-1713; limestone, 75-731; *South Africa*, Matsap formation, 75-1714; high-grade metamorphic rocks and intrusives, 75-2819; Onverwacht group, Swaziland sequence, 75-4; *Tanzania*, fission track dating of intrusion and ore deposition, 75-745; K/Ar study of S.P. Flow, 75-746; Franciscan metamorphic rocks, 75-1726; *California*, granitic rocks, 75-2573; *Colorado*, granodiorite, 75-1725; alunitic, 75-743; *Georgia*, Climax cave sediments, 75-744; *Maine*, granitic plutons, comparison of several methods, 75-2842; *Missouri*, Butler Hill granite, weathering, 75-19; *New Mexico*, trondhjemitic, 75-1725; *Utah*, igneous rocks, 75-1723; *Wyoming*, Precambrian K/Ar dates, 75-1724; Precambrian rocks, 75-742; *Canada*, radiocarbon dates, 75-18; K/Ar isotopic ages, 75-17; *Canadian Arctic*, granitoid gneisses, 75-2835; *British Columbia*, Palaeozoic zircon ages of crystalline complex, 75-2840; blueschists, 75-741; *Washington-British Columbia*, batholith and contiguous alkalic complex, 75-2841; *Manitoba*, quartz monzonite, 75-2839; *New Brunswick*, Acadian deformation, 75-740; *Newfoundland*, hornblende gabbro complex, 75-738; biotites, 75-1480; *N-W Territories*, Pb isotope ratios of slave craton, 75-16; Archaean and Proterozoic rocks, 75-2838; *Nova Scotia*, Keppoch formation, 75-739; *Quebec*, anorthositic pluton, 75-2836; Chibougamau greenstone belt, 75-737; biotite and hornblende from gneisses, 75-2837; *Bathurst I.*, interglacial peat deposits, 75-736; *Ellesmere I.*, metamorphic and plutonic rocks, 75-3649; *Greenland*, of iron formation, 75-1719; post-tectonic intrusions and gneisses, 75-1720; igneous rocks, 75-2244; discordant U/Pb ages in zircons from granite, 75-2834; gneisses, 75-734, 735; anorthositic, 75-735; *Argentina*, of Jurassic formation, 75-1727; *Surinam*,

- Age determination (*contd.*)
 major events in geological column, 75-20
 Agularite, comparison with acanthite and
 naumannite, 75-3564; *New Zealand*,
 75-2038
Agulhas Bank v. South Africa
 Ahlfeldite, series with cobaltomenite,
 X-ray, opt., 75-3565
Aichi Pref. v. Japan
 Aikinite, space group of derivatives, 75-
 3037, 3038; *Greece*, 75-2022; *USSR*,
 reflectance-dispersion curves, 75-534
 Åkermanite *v. melilite*
Akita Pref. v. Japan
 Alabandite, *Colorado*, 75-2766
 Alabaster, *Colorado*, 75-713
 Alamosite, phase relations, 75-3261; *S-W*
Africa, anal., opt., X-ray, 75-3479
 Alanine, asymmetric adsorption by quartz,
 75-1687
Alaska v. USA
 Albany, WA *v. Australia*
 Alberta *v. Canada*
 Albite *v. feldspar*
 Albitite, *Israel*, petrogen., 75-2605
 Alcohols, long-chain, calibration of layer
 silicates, 75-792
Aldan Shield, Russian SFSR v. USSR
Aleutian Is. v. Pacific Ocean
 Alexandrite, synthesis, 75-1086; *Tanzania*,
 75-1082
 Algal matter, Cu, Pb, and Zn sorption,
 75-1203
 — structure, *India*, in Aravalli rocks,
 75-241
 ALGERIA, metamorphosed berthierine,
 75-2438; *Béni-Embarek*, zunyite, 75-
 3142 (IV.6); *Constantine*, lamprophyre
 veins, 75-3666; *Djebel Chenoua*,
 Hercynian tectonics, 75-1417; *P'Oued*
Berkou, native tin in stanniferous greisen,
 75-1348; *Sahara Atlas, Monts des Ksours*,
 deltaic sedimentation, 75-614
Alice Springs, NT v. Australia
 Alkali basalts, *Sardinia*, 75-1496; *Ethiopia*,
 geochem-trends, 75-1165
 Alkali metals, anal. by flame emission
 spectrophotometry, 75-772; in authi-
 genic feldspars, 75-380
 Alkaline magma, *India*, in Deccan basalt
 province, 75-2623
 — rocks, *Sardinia*, 75-1494, 1495; *Poland*,
 magmatic, 75-579; *Russian SFSR*,
 crystallization temps., 75-2620; *Pakistan*,
 trace elements, 75-1451; *Newfound-*
land, petrol., 75-1479; *Ontario* and
Norway, 75-2589
 Alkalis, *Greenland*, loss and retention in
 phonolite dyke, 75-2243
 Alkanes, long-chain, calibration of layer
 silicates, 75-792
 Allanite, *Finland*, 75-3584; *USSR*, 75-212
 Allemnontite, in pegmatites, 75-2758
 Allevardite, interstratified mineral, 75-2161
 Allocasite, *Morocco*, As content, 75-3142
 (IV.3); *Queensland*, 75-2034
 Allophane, *Japan*, dehydration and structural
 formula, 75-1353; *West Indies* and *Japan*,
 in soils, 75-2973
 Alluvial mineralogical prospecting, 75-926
 Alluvial-flow conditions, heavy mineral
 segregation, 75-1019
 Almandine *v. garnet*
Alonnisos I. v. Aegean Sea
 Alps, post-Triassic series, 75-1410; high
 pressure metamorphism, 75-1411; Alpine
 metamorphism, review, 75-1609; meta-
 morphism of mafic rocks, 75-1610;
 metamorphism of peridotitic rocks, 75-
 1611; dating of blue amphiboles, micas,
 and associated minerals, 75-3; *Western*,
 ophiolite sequences, 75-1613; very low
 grade metamorphism, 75-1614; diffusion
 in resorbed garnets, 75-3456; blue
 amphiboles, 75-1312; *west and central*,
 fluid inclusions in quartz, 75-1330;
central, metamorphism of pelitic and
 marly rocks, 75-1616; *eastern*, thermal
 gradients and regional metamorphism,
 75-1621; *Western Tauernfenster*, plagio-
 clase in epidote-bearing rocks, 75-2699;
v. also Switzerland, Austria
 Altai, *Russian SFSR v. USSR*
 Alto Candeias *v. Brazil*
 Alumina, phase relations, 75-3290;
 removal from clays, 75-2920, 3119;
 detn. in iron ore by AAS, 75-1758;
 solubility in orthopyroxene coexisting
 with garnet, 75-281
 Aluminium, detn. by neutron-activation
 analysis, 75-2900; in quartz as geo-
 thermometer, 75-2452; ²⁶Al in stony
 meteorites, 75-426; effect on surface
 props. of kaolinite, 75-102; spectro-
 photometric detn., 75-1755; diffusion
 of helium in, 75-2087; *Italy*, distribution
 in sediments, 75-2269
 — compounds and minerals, vertical zone
 melting of Al₂O₃, 75-3142 (II.2); MgO-
 Al₂O₃ powders, defect structure and
 phys. props., 75-1026; stability of Al
 hydrous oxide coatings on montmoril-
 lonite, 75-2931; β-Al₂TiO₅ powder
 diffraction data, 75-3024; Al₂SiO₅
 Gibbs free energy, 75-2081; silicate
 phases in contact metamorphic aureoles,
 75-3459; silicate polymorphs in
 amphibolite facies pelites, 75-451
 — deposits, *Colombia*, economics, 75-965
 — isotopes, ²⁶Al in ordinary chondrites,
 75-1272; in stony meteorites, 75-426
 Alunites, *Colorado*, 75-2766; K/Ar dating,
 75-743
 Alunogen, *Italy*, crystal structure, 75-3062
Amapá v. Brazil
Amaravathi v. India
 Amazonite *v. feldspar*
 Amber, thermal props., 75-1112
 Amblygonite, *USSR*, containing augelite,
 75-539
Amelia, Virginia v. USA
 Amethyst, iron colour centres, 75-3519;
 Fe²⁺ and Fe³⁺ in, 75-498; Brazil twins,
 electron microscopy, 75-3298; defects,
 75-1331; heat treatment, 75-2189;
Brazil, biaxial colour centres, 75-497
 Amino acids, in Murchison meteorite, 75-
 2380; catalytic activity of clays on,
 75-368; extraction from soils and
 sediments, 75-794; *Russian SFSR*, in
 Precambrian rocks, 75-2206
 Åmli *v. Norway*
 Ammonium, *Israel*, non-exchangeable in
 soils, 75-1829
 Ammonium cpds., NH₄NO₃ transformation
 twinning, 75-850
 Ammonium nitrate (IV), crystal structure,
 75-176
 Amosite *v. amphibole*
 Amphiboles, Fe²⁺/Fe³⁺ ratios, 75-2421;
 synthesis and stability, 75-3263; dis-
 tortion polyhedra, 75-865; in inclusions
 in alkalic-basaltic lavas, 75-1463; *Scot-*
land, from Dalradian, 75-1307; *France*,
 75-1604; *Germany*, 75-1628; *Western*
Alps, blue, dating, 75-3; chem. and
 phys. props., 75-1312; *Norway*, in
 granogabbro, 75-1602; *Greece*, 75-
 3726; *Bulgaria*, habit variations, 75-
 1311; *Czechoslovakia*, and rock type
 subdivisions, 75-2548; *Russian SFSR*
 Au content, 75-2219; in gabbro-
 peridotite plutons, 75-2424; *Bering*
Sea, on continental shelf, 75-3802;
Malaysia, in pyroxenites, 75-2715;
New South Wales, in clinopyroxenite
 75-572; *New Caledonia*, from blue-
 schists, major element partitioning,
 75-462; *Arizona*, 75-3712; *Colorado*,
 75-3711; *Florida*, micro-textures with
 SEM, 75-2671; *Greenland, SE Africa*,
 inclusions in Archæan anorthosite
 plagioclases, 75-418
 —, actinolite, *Portugal*, in lamprophyre,
 75-2562; *Finland*, from carbonate
 complex, 75-3489; *Aegean Sea*, alkali
 amphiboles, 75-467; *Japan*, actinolite
 hornblende in gabbros, 75-2422; *New*
Hampshire, coexisting with hornblende
 75-468
 —, amosite, asbestos, heat treatment,
 X-ray, 75-1313
 —, anthophyllite, synthetic, upper stabi-
 75-3262; aluminous ferro-anthophylli-
 chloritoid breakdown product, 75-27;
Cornwall, in rocks of *Land's End* aure-
 75-1597; *Norway*, 75-1595; *India*, in
 granulite, 75-1633; asbestos from
 Hohenarsipur schist belt, min., chem.,
 75-243; schist, deposit, 75-669; *Calif-*
ornia, from metamorphosed ultrama-
 rocks, 75-653
 —, asbestiform, measurement in municipi-
 water supplies, 75-1201
 —, calcic, *Russian SFSR*, in gabbro-
 peridotite plutons, 75-1309; *California*
 from metamorphic ultramafic rocks,
 75-653
 —, clinoamphibole, *Norway*, from eclogite,
 75-2695
 —, crocidolite, asbestos, heat treatment,
 X-ray, 75-1313; *Canada*, 75-221
 —, cummingtonite, in coronas of meta-
 morphosed dolerite, 75-657; *Canada*,
NWT, X-ray and Mössbauer study, 75-
 3486
 —, edenite, hydrothermal synthesis, 75-
 1061
 —, gedrite, *New Hampshire*, helicoidal
 crack propagation, 75-1649
 —, hastingsite, *Russian SFSR*, from
 charnockite, 75-3487; *India*, from
 amphibolites, opt., 75-1310
 —, hornblende, cation distribution, 75-
 3483; lattice compactness and composi-
 tion, 75-3485; grain surface etching
 75-3458; aluminous hydrous-rich, anal.,
 75-3484; actinolitic, geochem., from
 tonalitic rocks, 75-469; in coronas of
 metamorphosed dolerite, 75-657;
Aberdeenshire, in weathered gabbro,
 75-828; *Israel*, surface texture by SEM,
 75-2663; *Sweden*, fission track studies,
 75-2803; *South Africa*, in ultramafic
 rocks, opt., 75-2616; *India*, from charn-
 kite series, 75-488; porphyroblasts in
 basic granulites, 75-667; *New Caledonia*,
 magnesian, opt., 75-1308; *Alaska*, 75-
 2572; *Arizona*, Cu, Mn, and Zn parti-
 tioning, 75-2423; *California*, Möss-
 bauer study, Fe²⁺/Fe³⁺ ratios, 75-3490;
Georgia, in sediments, 75-2672; *New*
Hampshire, coexisting with actinolite,
 75-468; *North Carolina*, in orbicular
 rocks, 75-604; *Virginia*, in deformed
 supracrustal assemblage, 75-674; *Wash-*
ington, miscibility with tremolite, 75-
 3482; *Quebec*, ⁴⁰Ar/³⁹Ar release ages,
 75-2837
 —, katophorite, *Quebec*, anal., 75-3492

- bles (*contd.*)
 agnesioarvedsonite, *Utah*, authi-
 c, chem., 75-470
 agnesiorichterite, decomposed mica,
Italy, 75-291
 agnesioriebeckite, *Finland*, from
 par zone, 75-3488; *India*, coexisting
 with aegirine, anal., 75-465
 Richterite, Mg-Fe-, phys. props., 75-
 9; *Finland*, from carbonate com-
 plex, 75-3489; *South Africa*, potassic,
 in kimberlites, 75-2430
 riebeckite, *Aegean Sea*, alkali amphi-
 bles, 75-467
 roditite, *India*, unmixing into magnesio-
 richterite and magnesio-riebeckite, 75-
 11
 remolite, *Norway*, 75-1595; *Tanzania*,
 transparent, opt., 75-1094; *Washing-*
ton, miscibility with hornblende, 75-
 82
 amphibolites, discrimination from char-
 nockites and anorthosites, 75-2690;
 metamorphic succession, 75-3833; *Swiss*
Alps, 75-3867; *Norway*, trace elements
 in gabbro/amphibolite transitions, 75-
 58; *Sardinia*, with hornblende and
 clinolite, 75-2703; *Poland*, geochem.,
 75-335, 336; *USSR*, K/Ar ages, 75-7;
India, 75-1310, 2717; geochem., 75-
 997; *Central African Repb.*, weathered,
 trace elements in kaolinites, 75-1852;
Western Australia, bands in Precambrian
 gneisses, 75-1636; *Greenland*, Early Pre-
 cambrian, origin, 75-3614; *Brazil*, from
 rhyolite deposits, 75-3117
 amphibolite facies, pelites, Al-silicate
 polymorphs, 75-451
 and Ringnes I. v. Arctic
 Shield, *Russian SFSR* v. *USSR*
 case, thermal expansion, 75-3860;
Austria, in Alpine rocks, 75-1680;
Russian SFSR, 75-1350
 olia v. Turkey
 white, *Quebec*, crystal structure, 75-3052
 alusite, formed in kaolinite trans-
 formation, 75-2143; synthetic, 75-2142;
Germany, viridine with high Mn_2O_3 ,
 75-2407; *Switzerland*, 75-1617; *Italy*,
 in gneisses, 75-1606; *India*, in amphi-
 bolite facies schist, 75-2408; *Rwanda*,
 chloritoid, divided structure, 75-1890;
USA, *Georgia*, in sediments, 75-2672
 es v. Peru
 esine v. Feldspar
 esites, oxygen fugacity, 75-2082;
 magma origin in Benioff zone, 75-607;
 copper deposit associated with, 75-3073;
Ireland, palaeomagnetic results, 75-
 3868; *Sardinia*, 75-1492; Sr isotopes
 in, 75-1158; *Poland*, Fe-Ti oxide
 minerals in, 75-2470; *Czechoslovakia*,
 lanburite in xenoliths from, 75-3461;
USSR, andesite-basalts, 75-592; *Russian*
SFSR, containing garnet, 75-445;
 distinction from basalt, 75-349; Caino-
 loic, detn. of U, Th, and K, 75-352;
Japan, montmorillonitization and for-
 mation of opal druse in, 75-121; dif-
 fusion coronas around quartz xeno-
 crystals, 75-3704; *Mongolia*, age deter-
 mination, 75-9; *Queensland*, andesite-
 thylite association, 75-600; *Ecuador*,
 alteration products, 75-3760; *Peru*,
 i, Rb, Ba, Sr fractionation, 75-348
 esitic eruptions, factors governing
 intensity, 75-3715
 hra Pradesh v. India
 osols, electron microscopy, 75-2970;
Spain, 75-849
 Andradite v. garnet
 Andremerite, *Zaire*, new mineral, X-ray,
 opt., 75-3589
 Anglesite, synthesis, 75-2133; topotactic
 transformation from linarite, 75-143;
Arizona, 75-231
 Angmagssalik v. Greenland
 ANGOLA, laterites, 75-1992; late Pre-
 cambrian mixtures, 75-1556; *Cabo*
Ledo, heulandite in basalt, 75-2461;
Morro Vermelho, geochron. of granitic
 rocks, 75-6
 Anhydrite, nucleation kinetics, 75-2116
 X-ray detn. in gypsum plaster, 75-2865;
 lineation and strain directions, 75-3779;
 EDTA dissolution, 75-2889; *Poland*, in
 epigenetic formation, 75-641; *Trucial*
States, mineral genesis, 75-2662; *New*
York and *Ontario*, in interstratified
 Grenville marble, 75-1183; *Mexico*,
 secondary origin, 75-2507
 Anilite, adsorption and oxidation by
 montmorillonite and hectorite, 75-108
 Anisole, chemisorption on Cu(II) hectorite,
 75-114
 Anisotropic materials, thermal and elec-
 trical props., book, 75-1803
 Ankerite, in carbonate, 75-1173; -silica
 stability, 75-3180; *Wales*, 75-932; *New*
South Wales, with calcite, as geothermo-
 meter, 75-536; *Canada*, 75-221
 Annabergite, *Germany*, 75-2755
 Annite v. mica
 Anorthosites, origin, 75-2582; as ceramic
 raw material, 75-990, 991; lunar and
 terrestrial, intergrowths in, 75-418; dis-
 crimination from charnockites and
 amphibolites, 75-2690; *Scotland*, chem.
 and economic aspects, 75-1980; *Poland*,
 magnetic props. and composition, 75-
 693; *India*, block structures in, 75-599;
 plagioclase in, 75-2448; *Nigeria*, first
 occurrence, 75-3668; *Pennsylvania*,
 petrol., 75-1481; *Labrador*, associated
 pyroxene-olivine-quartz assemblages,
 75-602; *Quebec*, palaeomagnetism,
 75-694; time-stratigraphic relationships,
 75-2836; differentiation of Morin com-
 plex, 75-601; *Greenland*, age detn. 75-
 735, 2289
 Antalya Bay v. Turkey
 ANTARCTIC OCEAN, manganese nodules,
 75-373; ^{226}Ra and Ra-Ba relationships,
 75-2308
 ANTARCTICA, continental margins, 75-
 2903 [48]; sodium sulphate deposits,
 75-2509; sodium in snow strata, 75-
 1788; *Bowman* and *Wilkins* coasts,
 geol., 75-613; *Coast Land*, *Brunt ice*
shelf, dynamics, 75-720; *Deception I.*,
 volcanism and water chem., 75-3409;
Graham Land, *Marguerite Bay*, gravity
 survey, 75-586; *Lassiter Coast*, ages of
 plutonic rocks, 75-2828; *Mt. Augusta*,
 plant tissue and mineralization in peat
 deposit, 75-1594; *Queen Alexandra*
Range, Sr isotopes in basalt, 75-2247;
Scotia Sea, evolution of continental
 margins, 75-2903 [40]; *South Shetland*
Is. and *Bransfield Strait*, crustal structure,
 75-573; *Southern Ocean*, clay minerals
 in deep-sea sediments, 75-2980; *Trans-*
antarctic Mts., Sr isotopes in non-marine
 carbonate rocks, 75-2829
 Anthophyllite v. amphibole
 Antigorite, thermal transformation in air,
 75-292; in nickel silicates, 75-486;
Japan, 75-485
 Antimonite, phase transitions, 75-3216;
 low mercury concentrations, 75-3035
 Antimony, AAS detn. on ion-exchange
 resins, 75-2872; geochem. indicator,
 75-2331; in pegmatites, 75-2758; detn.
 in ores and concentrates by AAS, 75-
 1764; *Taiwan*, in enargite and luzonite-
 famatinite, 75-2499
 —, native, *Greenland*, 75-1397, 2497
 —, deposits, *France*, gangue quartz in,
 75-925; *Bolivia*, 75-2009; *Australia*,
 hydrothermal deposit, 75-954;
Queensland, 75-980
 Apache mineralogical knowledge, 75-716
 Apatite, fluoride substitution, 75-2123;
 uranium bearing, 75-2255; crystal chem.,
 75-3142 (IV.1); in human pathology,
 75-2515; in system apatite-nepheline-
 villiumite, 75-1071; $\text{Ca}_5(\text{VO}_4)_3 \cdot \text{OH}$,
 structure refinement, 75-178; *Finland*,
RE-bearing, 75-3584; *Russian SFSR*,
 in nepheline syenite, 75-460; *Asia*,
 chatoyant, opt., 75-3314; *India*, 75-
 2514; *S.W. Africa*, from pegmatites,
 75-2513; *USA*, *Georgia*, 75-310; *Min-*
nesota, in early Precambrian rock, 75-
 538; *Quebec*, history of discovery,
 75-2759; *Greenland*, trace elements,
 75-1161
 —, chlorapatite, synth., vibrational spectra,
 75-2129; $\text{Sr}_2(\text{PO}_4)_3\text{Cl}$, structure refine-
 ment and random error analysis, 75-
 179
 —, fluorapatite, treatment and replace-
 ment of F by Cl, 75-3141; thermo-
 luminescence, 75-2732; IR spectra of
 OH ions, 75-1375; *Idaho*, inclusions in
 almandine, anal., 75-3312
 —, hydroxyapatite, vibrational spectra,
 75-3054; EPR of Mn^{2+} , 75-3055; IR
 spectra, 75-3054; Sr-bearing, 75-3053
 Apennine Mts. v. Italy
 Aphthalite, *Western Australia*, 75-3886
 Aplites, *Sutherland*, 75-587; *Ireland*, con-
 taining zircon, 75-441; *Portugal*, con-
 taining tourmaline, 75-1136; *Russian*
SFSR, Au content, 75-2219
 Apophyllite, habit types, 75-3509; *Czecho-*
slovakia, gabbro-peridotite massif, 75-
 787; *India*, green, vanadium-bearing,
 75-487; *North Carolina*, 75-2769
 Appalachian Mts. v. USA
 Aquamarine, colour and absorption spectra,
 75-1083; *USA*, *Georgia*, 75-310
 Aquifer chemistry, in hot-water geothermal
 systems, 75-400
 Aquitaine v. France
 ARABIA, *Arabian Desert*, ring complexes,
 75-1497
 Aragon v. Spain
 Aragonite, precipitated in brines, 75-2120;
 relics in calcite-replaced Pleistocene
 skeletons, 75-1688; skeletal, uranium
 content, 75-321; synthesis, 75-1046;
 in human pathology, 75-2515; crystal-
 lization history, 75-3573; precipitation
 from supersaturated sea-water, 75-2512;
 activity-product constants, 75-1047;
Spain, type locality description, 75-703;
Austria, 75-1682; *Dead Sea*, 75-2053;
South Australia, in stromatolites, 75-
 3576; *Colorado*, in oil shale, 75-1370;
Utah, in oolites, 75-3575
 Arakawaite v. veselyite
 Aramoyoite, *Bolivia*, crystal structure, 75-
 171
 Arc spectrograph, major and trace elements
 in lunar soil, 75-51
 ARCTIC, sodium in snow strata, 75-1788
Amund Ringnes I., glacial features and
 pingos, 75-1692
 ARCTIC OCEAN, continental margin,

- ARCTIC OCEAN (*contd.*)
 geol., 75-2903 [56]; *s. Barents Sea*, clay fraction of sediments, 75-1169; *Bear I.*, length-slow chalcedony and sulphate relics, 75-2457; 'schizohaline' rocks, 75-3790
- Arendal v. Norway*
Argentara v. Italy
- ARGENTINA, continental shelf, Pre-cretaceous basins, 75-2903 [33]; porphyry copper deposits, 75-1972; *Buenos Aires*, Recent sediments, 75-2903 [12]; *Golfo San Matias*, clay minerals in sediments, 75-2917; *La Alcaparrosa*, slawikite, 75-3044; *Salta*, aristarainite, new mineral, 75-547; *Santa Cruz*, *Chon Aike* formation, palaeomagnetism and age, 75-1727
- Argentite, *Seitzerland*, 75-3104; *Peru*, 75-2010
- Argentojarosite, *Colorado*, new occurrence, 75-2767
- Argon, electrical discharges in extraction systems, 75-724; degassing models of Earth, 75-1123; isotope ratios from microinclusions in quartz, 75-1138; USSR, in minerals of *Volyn* pegmatite, 75-317
- Argyrodite, *New Zealand*, 75-2038
- Ariège v. France*
- Aristarainite, *Argentina*, new mineral, opt., X-ray, 75-547
- Arizona v. USA*
- Arkose, *Norway*, 75-561
- Armalcolite, *Apollo 17*, in breccias, 75-419; ortho- and para-, 75-1239
- Armenian SSR v. USSR*
- Armenite, *Norway*, crystal structure, 75-3020
- Armorian province, development, 75-3627
- Arsenates, crystal structure of $\text{NaH}_2\text{AsO}_4 \cdot \text{H}_2\text{O}$, 75-3032; *Germany*, 75-935
- Arsenic, spectrophotometric detn. in soils and rocks, 75-2871; AAS detn. on ion-exchange resins, 75-2872; geochemical indicator, 75-2331; in pegmatites, 75-2758; detn. in ferrotungsten and tungsten ore, 75-1774; *Burma*, in sphalerites, 75-2492
- minerals, *Czechoslovakia*, $\alpha\text{-AsS}$, 75-2504
- Arsenopyrite, *Cardiganshire*, 75-932; *Turkey*, 75-973; *Poland*, native Au in 75-2467; USSR, 75-947; *Russian SFSR*, Au content, 75-2219; *Queensland*, cobaltian, 75-2034
- Arsenostannide, *Russian SFSR*, 75-3568
- Asbestos, *India*, from schist belt, min., chem., 75-243; *Texas* deposit, 75-995
- , fluor, synthesis from talc, 75-3264
- Ash, detn. in coal by beta back scattering, 75-781
- beds, *South Africa*, in Karroo gray-wackes, 75-3798
- ASIA, yellow cat's eyes, 75-3314; *SE* and *Malaya*, continental drift, 75-2775
- Assab Range v. Ethiopia*
- Asteroids, polarometric observations, 75-1695; origin, collision with comet, 75-2371; evolution, 75-3913; original distribution, 75-3914; spectral reflectivities, 75-3441
- Astrophyllite, crystal chem. of group, 75-555; triclinic cell comparison, 75-2989
- ATLANTIC OCEAN, continental margins, 75-2903 [2, 6, 20]; isotope and trace element variation in volcanic rocks, 75-2245; ^{14}C activity and tritium in water, 75-2301, 2305; Sr in oceanic profiles, 75-2310; water sampling, 75-2311; movement of hot spots, 75-2641; gold in igneous rocks, 75-343; Zn in nodules, 75-2229; *N*, wind transport of detrital material, 75-1553; quartz particle size in sediments, 75-3793; *S*, geochem. history of sediments, 75-3366; *eastern margins*, aeolian dust, 75-3794; *Azores*, chem. of abyssal tholeiites, 75-2643; *Lajes*, ignimbrite, petrol., 75-3768; *Terceira*, basaltic volcanism, 75-1491; *Bay of Biscay*, continental margin, 75-2903 [24]; seismic study, 75-3880; *Bermuda*, borehole, heat flow and heat production, 75-698; K/Ar dating of drill core, 75-747; *Bermuda Rise*, trace elements in deep-sea sediments, 75-1174; *Canary Is.*, dating, stratigraphy, and geomagnetic polarity history, 75-729; titan-pyroxenes in ignimbrites and lavas, 75-285; clinopyroxenes in mafic and ultramafic rocks, 75-2414; *Betan-curia massif*, formation, 75-1518; *Gran Canaria*, ignimbrite eruptions, 75-3727; *Madeira*, petrol., 75-2644; *Tenerife*, *Las Cañadas* volcanoes, field relations, 75-605; *Tenerife*, *La Palma*, & *Hierro*, K/Ar ages, volcanic stratigraphy & palaeomagnetic history, 75-2831; *Cape Verde I.*, phosphate minerals, 75-2517; lava from *Fogo* eruption, 75-2639; *Hatteras* abyssal plain, petrol., and origin of deep-sea sands, 75-3795; *Jan Mayen I.*, phlogopite, 75-1318; *Mid-Atlantic Ridge*, magnetic survey, 75-695; rodingites, 75-3769; sedimentary serpentinites, 75-3770; pillow lavas, 75-1516; sedimentary deposition and lithogenesis, 75-1517; *Mid-Atlantic Valley*, basalt fission track dating, 75-2832; *Puerto Rico trench*, basalts and serpentinite, 75-1525, 1526; *Reykjanes Ridge*, *Iceland-Faroes Ridge*, geochem. of sediments, 75-1552; *Rockall*, Precambrian rocks, 75-1513; Grenville age rocks, 75-1514; microgabbroic intrusion, 75-1515; structural development of plateau, 75-2903 [25]; bazirite, 75-2537; geol., age data, 75-2538; *St. Helen's Reef*, geol., age data, 75-2538; magnetite, olivine, clinopyroxene, 75-2397
- Atmosphere, age, 75-1121; evolution, 75-1123; helium isotopes in, 75-3414; accumulation of fossil CO_2 , 75-1218; trace metals in, 75-3413; reducing, red clouds in, 75-3900; age of oxygen, 75-1121; Earth's, biological modulation, 75-2313; mass balance with lithosphere and hydrosphere, 75-2202; Jovian, 75-2378, 2379; Archaean, *Russian SFSR*, state of oxygen, 75-2315; *Colorado* and *Idaho*, element movement from coniferous trees, 75-2329
- Atmospheric gases, in evaporites, 75-1181
- Atomic absorption spectrometric analysis, improved lithium-fluoborate method, 75-43; carbon rod atomizer for Ag and Au determination, 75-767, 768; hollow-T carbon atomizer, 75-2873; accuracy of metal analyses, 75-44; As, Se, Te, Sb and Bi on ion-exchange resins, 75-2872; detn. of Hg, 75-1769; detn. of Rb and Li, 75-41; of standard rocks and minerals, 75-2341; detn. of Au traces in rocks, minerals and ores, 75-39, 1775; Sb in ores and concentrates, 75-1764; Ni, CuSO_4 and crude Cu in ores, 75-1778; CaO, MgO, Mn, Cu, Zn & Al_2O_3 in iron ore, 75-1758; Ti, V, Ni, Cr, Pb, Bi in iron ore, 75-1760; Pb in carbonate rocks, 75-42; decomposition and analysis of silicate rocks, 75-769; sodium in *Arctic* and *Antarctic* snow strata, 75-1788
- Atomic scattering factors, compact representation, 75-28
- Attapulgit v. palygorskite
- Attunga, NSW v. Australia*
- Augelite, USSR, stanniferous rare-metal granite, anal., opt., X-ray, 75-539
- Augite v. pyroxene
- Augitite lava, *Pacific Ocean*, alkalic, 75-2646
- Aurichalcite, Zn/Cu ratios, RI, and X-ray data, 75-537
- AUSTRALIA, gemstones, book, 75-789
- sedimentary and magmatic events, 75-1426; crude oil composition and geol. environment, 75-1217; silcretes and silica diagenesis, 75-3799; molybdenite polytypes, 75-1364; ilmenites, 75-1024
- Precambrian iron-formations, 75-2012; Adelaidean stratiform copper deposits, 75-908; *Tasman geosyncline*, greenstones and spilites, 75-3771
- , NEW SOUTH WALES, plutonic and metamorphic rocks, 75-1432; tectonics and sedimentation, 75-1432; Mesozoic and Cainozoic igneous rocks, 75-1432; Cainozoic volcanic rocks, K/Ar ages, 75-732; NE, ultramafic and associated rocks, 75-1432; *central tablelands*, structural features, 75-1432; *Attunga*, eclogite from serpentinite, 75-2625; *Blue Mts.*, kaolinite clayrocks, 75-1873
- Broken Hill*, geol. and min. of lode, 75-3112; high grade regional metamorphism, 75-1639; high Mg-smithsonite, 75-3579; rhodonite, 75-1091, 1092, 1093; pyroxmangite, 75-1092, 1093; granulites, pyroxene geothermometry, 75-3469; *Clarence Basin*, geol., 75-1432; *Coolac*, epidote minerals in ophiolites, 75-3463; ultramafic belt, opaque mineral assemblages, 75-3554; *Delegate* basaltic pipes, garnet pyroxenite and pyroxene granulite xenoliths 75-258; *Eastern Riverina*, pedogenic palygorskite, 75-134; *Emmaville-Torrington*, igneous rocks, 75-1432; *Gloucester* garnet clinopyroxenite inclusions from diatremes, 75-572; *Liston*, *Duval* and *Sunnyside*, adamellites, 75-1432; *New England* batholith, granitic rocks, 75-1432; *Nundle dist.*, albitic basic rocks 75-1432; *Queanbeyan*, vesuvianite hornfels, 75-450; *Sofala*, coexisting calcite-ankerite solid solution geothermometer, 75-536; *Sydney Basin*, geol., 75-1432; *Torrington*, inclusions in fluorite, 75-1786; *Warrumbungle volcano*, phonolite-trachyte spectrum, 75-3707
- , NORTHERN TERRITORY, *Alice Springs*, pedogenic palygorskite, 75-134; *Arltunga nappe complex*, Rb/Sr dates, 75-2826; *McArthur R.*, Pb-Zn-Ag deposit, Precambrian microfossils, 75-2035; S isotope ratios, 75-1143; *Ormsiston Gorge*, geol. and geochron. of Arunta complex, 75-733; *Tennant Creek*, *June mine*, krupkaite, 75-3039
- , QUEENSLAND, fracture traces in Oweenee granite, 75-2851; soil catena on weathered basalt, 75-841; *Broad Sound*, dolomite concretions, 75-3380; *Cracow goldfield*, gold deposits, 75-953; *Darling Downs*, genesis of red and black soils, 75-1874; *Gympie*, *Neardie* antimony deposits, 75-980; *Kilkivan* mineral resources, 75-219; *Mt. Isa*, U-Th-Pb isotopes in igneous rocks and

- ALIA, QUEENSLAND (contd.)**
 Pb, 75-1717; tetrahedrite-freibergite
 series, 75-2498; geochron. and structure,
 75-3110, 3111; *Mt. Isa* and *Cloncurry*,
 mining, 75-952; *Mt. Isa* and *Mt.*
Isa, Co mineralization, 75-2034;
Mt. Mitchell, nepheline benmoreite,
 75-2577; *Mt. Ngungun*, holocrystalline
 antlerite, 75-3674; *Mundubbera*,
 geol. of area, 75-954; *Nychem*, andesite-
 rhyolite association, 75-600; *Ravens-*
burne, kaolin deposit, 75-840; *Tasman*
syncline, tin mineralization, 75-2213;
Wepa, borehole in bauxite deposit,
 geochem., min., 75-215; vanadium con-
 cent., 75-2227; *Wolfram Camp*, plumbian
 pyromorphite-cis-klovite-bismuthinite, 75-
 366; molybdenite-wolframite-bismuth
 deposits, 75-2033
SOUTH AUSTRALIA, Coorong Lagoon,
 hydromagnesite and aragonite from
 stromatolites, 75-3576; *Dome Rock*
 mine, phosphorian lavendulan, 75-1380;
Hundred of Bright, oxidised Cu minerals,
 75-2037; *Pernatty Lagoon*, base metal
 mineralization, 75-2036; *Tunkatilla*
reach, stratigraphy, structure and meta-
 morphism of Kanmantoo group, 75-
 638; *Williamstown*, syngenetic Cu
 deposit, 75-3113; *Warren National*
Park and *Mt. Crawford State Forest*,
 structural geol., 75-1637
TASMANIA, Queenstown, Mount
 Read volcanic rocks, 75-1454; *Strath-*
gordon, Si⁴⁺ variation in phengites,
 75-2428
VICTORIA, Cainozoic volcanic rocks,
 75-1716; ilherzolite inclusions in basanites,
 75-1160; *Ballarat*, dislocations and
 bubbles in vein quartz, 75-924; *Mt.*
Elephant, partially fused granite blocks,
 75-1476
WESTERN AUSTRALIA, mineral
 division report, 75-3886; ages of iron
 formations, 75-1721; amphibolite and
 basic granulite bands in Precambrian
 gneisses, 75-1636; continental margin,
 75-2903 [44]; diamond exploration,
 75-3118; australites, 75-3451; sand
 fulgurites 75-3895; avian derived phos-
 phate deposits, 75-1002; Precambrian
 stratigraphy, 75-3645; *Albany*, adam-
 elite plutons, 75-1474, 1475; clastic
 dykes, 75-3646; *Balladonia*, geol., 75-
 1430; *Bartlett Bluff*, almandine, 75-3886;
Bentley, geology, 75-1428; *Blackstone*
 region, geol., 75-3642; *Cue*, geology,
 75-1427; *Culver*, geol., 75-1431; *Dingo*
Donga Cave, uricite, new organic
 mineral, 75-553; *East Kimberley*,
 chromite alteration, 75-3542; *Eastern*
Goldfields, structural subdivision, 75-
 3644; *Fraser Range*, metamorphosed
 gabbro and pyroxene granulites, 75-
 2722; *Geraldton*, geology, 75-1429;
Hamelin Pool, stromatolitic associations,
 75-1557; *Hamersley* group, dolerite sills,
 75-3706; varve cycles, 75-1977; *Jimber-*
ana intrusion, geochem. of pyroxenes,
 75-1302; *Kambalda*, supergene alteration
 of Ni sulphides, 75-3332, 3333; *Milgun*,
 collinsite, 75-3886; *Mt. Clifford*, Arch-
 ean ultramafic lavas, 75-3673; *Mt.*
Crofton, age of granite, 75-2827; *Mt.*
Windarra Ni deposit, supergene altera-
 tion, 75-2495; *Murra-el-elevyn cave*,
 guanine, new organic mineral, 75-553;
Paterson Range gold prospect, 75-3109;
Pilbara goldfield, fluorite, 75-3125;
Quairading, orthopyroxenes, etc. from
 granulites, 75-1298; *Salt Lick Creek*,
 layered intrusion, 75-3705; *Scotia mine*,
 mixed-layer garnierite, 75-2439; *Widgie-*
mooltha and 5 other localities, glauko-
 sphærite, new mineral, 75-552; *Wodgina*,
 wodginite, 75-882; *Woodbine Well*, Ni-
 bearing aluminium serpentine, 75-3500;
Yampi, geol. map, 75-3643; *Yinnietharra*,
 clinobisvanite, new mineral, 75-550;
 dravite and phlogopite, 75-3886;
Zanthus, geology, 75-1430
Australites, Western Australia, 75-3451
AUSTRIA, lazulite occurrences, 75-2757;
Alps, sphene occurrences, 75-1681;
TiO₂ minerals, 75-1680; oceanic mafic
 rocks, 75-3766; *Graz*, genesis of
 Palaeozoic rocks, 75-2019; *Heiligen-*
bluth, mineral occurrences, 75-1677;
Hohen Tauern, metasediments, 75-
 1619; oxygen isotopes in metamorphic
 rocks, 75-1623; ferromagnesian minerals
 in Moldanubian granulites, 75-3834;
Salzburg, bavenite, 75-1678; *Steiermark*,
Gleichenberg, alteration of trachytes,
 75-3718; *Klösch*, thaumasite in basalt,
 75-1682; *Tauern window*, eclogites and
 high-grade blueschists, 75-1612; petro-
 logy, 75-1413; *Tyrol*, dolomite-calcite
 in marble, 75-1374; *Zillertal Alps*, rare
 earths in carbonates and gneisses, 75-
 2286; deformed sodic plagioclase, 75-
 1326
Autunite, France, in granites, 75-3346
Aveyron v. France
Awalpe Creek v. Surinam
Awaruite, New South Wales, 75-3554
Axinite, California, structure refinement,
 75-3009
Azores v. Atlantic Ocean
Azurite, Germany, genesis, 75-2118;
Switzerland, 75-3104; *Australia*, 75-952
Bababudan Hills v. India
Baddeleyite, Norway, in ilmenite ores,
 75-2477
Baffin Bay, NWT v. Canada
Bahia v. Brazil
Bakhuis Mts. v. Surinam
Bakreswar v. India
Balipholite, China, new mineral, anal.,
 opt., X-ray, 75-3590
Ball clay, United Kingdom, resources, 75-
 2949
Balladonia, WA v. Australia
BALTIC SEA, origin of coastal placers,
 75-204; heavy metal and carbon isotopes
 in Recent sediments, 75-366
Bamble v. Norway
Bancroft, Ontario v. Canada
Bangalore v. India
BANGLADESH, Cox's Bazar, polyfram-
 boidal pyrite in beach sand deposit,
 75-2485
Banks I., NWT v. Canada
Baramba v. India
Barents Sea v. Arctic Ocean
 Barium, partitioning between clinopyroxene
 and liquid, 75-1058; in phlogopites,
 effect on X-ray intensities, 75-476; in
 carbonaceous and ordinary chondrites,
 75-431; Ba²⁺ impurity in KCl, X-ray,
 75-185; neutron-activation anal. in
 ultramafic rocks, 75-38; in K-feldspar,
 75-3015; geochemical indicator, 75-
 2331; *West Germany*, Ba-Sr mineraliza-
 tion, 75-2052; *Italy*, partitioning in
 volcanic rocks, 75-2252; *Minnesota*, in
 granitic rocks, 75-2285; *Nevada*, in
 hybrid rocks, 75-2241; *Peru*, fractionation
 in calc-alkaline rocks, 75-348
 — compounds, BaCO₃ decomposition,
 75-3159; prep. of BaCl₂ from baryte,
 75-2051; BaFCl structural refinement,
 75-1950
 Barnard's star, planetary system, 75-3912
 Barrerite v. zeolites
Barringer crater, Arizona v. USA
Barrytown v. New Zealand
 Barysilite, phase relations, 75-3261
 Baryte, synthesis, 75-2113; marine, Th and
 U contents, 75-2216; in prep. of BaCl₂,
 75-2051; microbial mobilization, 75-
 1202; *England*, S and O isotopes, 75-
 2210; *Durham*, mineralization in Lr.
 Magnesian Limestone, 75-235;
Germany, 75-202, 937; origin of
 occurrences, 75-2052; *Poland*, con-
 cretions in Poznan series clays, 75-837;
 mineralization and tectonics, 75-1989;
India, in Ralam-Garbyang sequence,
 75-242
 — deposits, *Germany*, stratigraphy,
 mineralogy, etc., 75-236; folding of
 orebodies, 75-1986; *Poland*, structure
 and mineralization, 75-237
 Basalts, oxygen fugacity, 75-2082; spatial
 distribution of uranium, 75-353; crushed,
 gas adsorption, 75-1738; polarity of un-
 oriented samples, 75-3875; ultramafic
 inclusions and composition of upper
 mantle, 75-2576; oceanic, viscous
 remanent magnetization, 75-1661;
 oceanic ridge, Eu and Sr distribution
 coefficients, 75-1159; solid- and liquid-
 type relationships, 75-2254; lunar, iron
 oxidation state, 75-423; KREEP-rich,
 age, 75-1244; crystallization of plagioclase,
 75-2169; feldspathic, 75-2346;
 pyroxene-phyric, 75-2345; *France*, 75-
 2089; K/Ar dating, 75-2809; in lens in
 granites and gneisses, 75-1604; *Germany*,
 K/Ar age detn., 75-1706; *Sweden*, K/Ar
 dating, 75-2802; *Norway*, 75-561;
Portugal, age detn., 75-1705; *Sardinia*,
 Sr isotopes, 75-1158; *Cyprus*, basalt-
 sediment relations on Mesozoic ocean
 ridge, 75-3767; *Turkey*, augite, 75-972;
Iceland, magnetic props. of minerals
 from, 75-2742; low ¹⁸O content, 75-
 347; from centre of mantle plume,
 75-2642; Sr isotopes and rare earths in,
 75-1155; tholeiitic, geochem., 75-1151,
 1152, 1153, 1154; *USSR*, andesite-
 basalts, 75-592; *Russian SFSR*, dis-
 tinction from andesite, 75-349; com-
 position from stages of tectomagnetic
 cycle, 75-351; Cainozoic, detn. of U,
 Th and K, 75-352; *Mid-Atlantic Ridge*,
 tholeiitic, synthesis of organic matter,
 75-313; *Mid-Atlantic Valley*, fission track
 dates, 75-2832; *Puerto Rico trench*,
 petrol., 75-1525; rare-earth geochem.,
 75-1526; *Israel*, weathering products,
 75-1856; *India*, tholeiitic, spilitic
 degradation, 75-648; veins and inclusions
 in flow, 75-2569; differentiated, trace
 element behaviour, 75-2251; *Indian*
Ocean, petrol., 75-2647; *Japan*, diffusion
 coronas around quartz xenocrysts, 75-
 3704; *Egypt*, K/Ar ages, 75-1711;
Ethiopia, basalt-pantellerite sequence,
 75-3730; *Rhodesia*, olivine-rich, 75-
 1472; *South Africa*, low-potash pillow
 basalts, 75-3700; *Queensland*, weathered,
 soil catena on, 75-841; *Antarctica*, Sr
 isotope composition, 75-2247; *New*
Caledonia, tholeiitic, 75-2651; *Pacific*
Ocean, from leg 6 of deep-sea drilling
 project, 75-612; *Hawaii*, tholeiitic,
 solubility of S in melt, 75-254; vesicular.

Basalts (*contd.*)

- thermal conductivity, 75-2740; *Maryland*, depth of emplacement, 75-1482; *New Mexico*, major element variation, 75-2246; *New Mexico*, olivine-tholeiite, Sr isotopes, 75-2249; *Oregon*, containing levynite-offretite intergrowths, 75-507; *Oregon Coast Range*, 75-1459; *British Columbia*, containing ilherzolite nodules, 75-1478; *NW Territories*, Aphebian Hurwitz group, 75-603; *Mexico*, age and significance, 75-3748
- Basaltic glasses, experimental palagonitization, 75-3175
- liquids, iron activity and olivine solubility, 75-3176
- magmas, *Nova Scotia*, and coexisting granitic magmas, 75-3355
- melts, gold and rhenium content, 75-312
- Basanites, *France*, melting of acid xenoliths in, 75-2596; *New South Wales*, 76-1432; *Victoria*, containing ilherzolite inclusions, 75-1160
- Bashkiriya, Russian SFSR v. USSR*
- Basic rocks, *Norway*, rare-earth distribution, 75-3361
- Basic-ultrabasic rocks, *Turkey*, 75-1471; *China*, layered intrusives, 75-1449
- Bastnäsite, geothermometer, 75-2336
- Batholithic intrusions, *Pyrenees and Ireland*, 75-2595
- Batholithic rocks, *USA*, calcic and calc-alkalic, Ir content, 75-2236
- Bathurst I., NWT v. Canada*
- Baumite, *New Jersey*, new mineral, chem., 75-3592
- Bauxite, formation, 75-1179; formation of lateritic silicate bauxites, 75-198; gold content, 85-3337; pyrite types in, 75-2484; *France*, fossil vegetation in, 75-3336; formation from poorly crystallized kaolinite, 75-2960; *Hungary*, Cr-bearing boehmite in, 75-2479; *USSR*, in Jurassic deposits, thermal analyses, 75-2964; in kaolinite, 75-119; supergene metasomatic origin, 75-214; *Queensland*, vanadium content, 75-2227; geochem., mineralogy of deposits, 75-215; *Colombia*, deposits, 75-965; *Surinam and Guyana*, resiliification, 75-2008
- Bavaria v. Germany*
- Bavenite, *Austria*, new find, 75-1678
- Bay of Biscay v. Atlantic Ocean*
- Baykan v. Turkey*
- Bazirite, *Rockall I.*, new mineral, anal., opt., X-ray, 75-2520, 2537
- Bear I. v. Arctic Ocean*
- Beartooth Mts., Montana v. USA*
- Beaverlodge, Saskatchewan v. Canada*
- Beech Creek, Oregon v. USA*
- Beidellite v. montmorillonite
- BELGIUM, coastal plain, quartz grains, 75-1540; *Huy*, mixed layer montmorillonite-chlorite, 75-830; *Longvilly mine*, Zn and Cu in soils, 75-3419; *Seilles*, colouration of fluorite, 75-1384
- Bellingrite, *Chile*, structure, stereochem. of Cu(II) and I (V), 75-184
- Belorussian SSR v. USSR*
- Bengal v. India*
- Benioff zones, angle of dip, and metallogenic belts, 75-904
- Benitoite, absorption spectrum, 75-862
- Benmoreites, *Queensland*, upper mantle source, 75-2577
- Bensidine, adsorption and oxidation by montmorillonite and hectorite, 75-108
- Bentley, WA v. Australia*
- Bentonite, adsorption of trace copper, 75-113; fine-grained, lath-shaped units in, 75-1828; stationary phase in gas solid chromatography, 75-823; with lime, IR spectra, 75-3163; organo-bentonites, structures, 75-92; *Czechoslovakia*, comparative study, 75-2969; *Japan*, 75-129; *Mozambique*, 75-2968; *New Zealand*, ferriiferous-beidellite, 75-842; *Texas*, Marker bed, min. & geochem., 75-844; *Alberta*, deposits, 75-136
- Benzene, in ground water, 75-405
- Berg Auka v. South West Africa*
- Bergell Alps v. Switzerland*
- BERING SEA, structure of basins, 75-2903 [49]; heavy minerals on continental shelf, 75-3802
- Bermuda v. Atlantic Ocean*
- Berthierine, *Algeria*, Mid-Cretaceous rocks, 75-2438
- Beryl, coloured by gamma radiation, 75-1097 colour and absorption spectra, 75-1083; green, distinction from emerald, 75-1080; elastic properties, 75-683; atomic vibrations and thermal expansion, 75-864; paragenesis in pegmatites, 75-2409; *Finland*, transparent varieties, 75-3466; *China*, 75-3108; *Malagasy Rep.*, Li-bearing, crystal structure, 75-861; *USA*, *Georgia*, golden, 75-310; *New Hampshire*, 75-2761; *Utah*, red, opt., 75-1084; *Brazil*, coloured by vanadium, opt., 75-1085; *Colombia*, 'trapiche emerald', divided structure, 75-1890
- Beryllium, organic gravimetric reagent, 75-1767; behaviour during feldspar and muscovite weathering, 75-2228; *China*, in granitic rocks, 75-3345; *Utah*, hydrothermal alteration of deposits, 75-2217; *Greenland*, mineralization in *Ilitmaussaq* intrusion, 75-1340
- Beryllonite, *Maine*, inclusions in, 75-2188
- Berberianite, *Czechoslovakia*, from uranium deposits, 75-3085
- Bianchite, *Bulgaria*, cupriferous, formula, opt., 75-1368
- Bielice v. Poland*
- Bighorn Mts., Wyoming v. USA*
- Bihar v. India*
- Bikaner v. India*
- Bingham, Utah v. USA*
- Biotite v. mica
- Biringuccite, crystal structure, 75-885
- Birnessite, *Western Australia*, 75-3886; *Korea*, 75-978; *Colorado*, in spherulite in obsidian, 75-1683
- Bismuth, spectrophotometric detn. in sulphide ore, 75-1768; in (Pd, Pt)(Te, Bi)₂ mineral system, 75-764; detn. in iron ore by AAS, 75-1760; AAS detn. on ion-exchange resins, 75-2872; geochem. indicator, 75-2331; in pegmatites, 75-2758
- , native, *Czechoslovakia*, 75-2287
- minerals, *Malagasy Rep.*, in pegmatitic granodiorite, 75-2025
- deposits, 75-904; *Queensland*, pipe-like deposits, 75-2033
- Bismuthinite, *Czechoslovakia*, 75-2287; *USSR*, reflectance-dispersion curves, 75-534; *Japan*, chem. anal., 75-530; *DTA*, 75-532; electron probe anal., 75-533; *China*, 75-3108; *Queensland*, plumbian, formula, 75-1366
- Bismuthinite-aikinite group, crystal structures, 75-3038; *Switzerland*, 75-930
- Bismutoferrite, *Western Australia*, 75-3886
- Bitlis v. Turkey*
- Bituminoid reduction, index for clay rocks, 75-383
- Bityite, *Western Australia*, 75-3886
- Bjarebyite, *New Hampshire*, crystal structure, 75-181
- Black Forest v. Germany*
- BLACK SEA, geol. of ocean basin, 75-290 [50]; Se in recent sediments, 75-363; Zn in Holocene sediments, 75-364; Pb in Holocene sediments, 75-365; Zr in recent sediments, 75-628; geomagnetic variation in sediment core, 75-2752; *NW coast*, gold occurrences in sands, 75-944
- Blackstone, WA v. Australia*
- Blomstrandine, *USSR*, 75-212
- Blue Mts., NSW v. Australia*
- Blueschists, *Austria*, high-grade, metamorphism, 75-1612; *Eastern Alps*, 75-1621; *British Columbia*, K/Ar dating, 75-741
- Boehmite, *Hungary*, Cr-bearing, 75-2479
- Bohemia v. Czechoslovakia*
- Bokaro v. India*
- BOLIVIA, antimony deposits, 75-2009; aramoyoite, crystal structure, 75-171; *Cerro Rico De Potosi*, phosphophyllite, 75-3888
- Boracite, *Poland*, in salt dome, 75-3883
- Borate deposits, *Turkey*, clay minerals in, 75-1855
- Bore-holes, temperatures, 75-2747; *United Kingdom*, 75-1401
- Bornite, DTA, 75-526; *Germany*, 75-2755; *Switzerland*, 75-3104; *Russian SFSR*, 75-2027; *India*, 75-1996; *Zaire*, 75-975; *Australia*, 75-952
- Boron, California v. USA*
- Boron, detn., distribution, and concentration in minerals and rocks, 75-52; diagenesis and palaeosalinity technique, 75-2335; in chondrodite, 75-1286; *China*, in salt lake brine, 75-1204; *Illinois* in illite, 75-3375; *SE Canada*, in tills and shelf sediments, 75-358
- Bosnia v. Yugoslavia*
- Botallack, Cornwall v. England*
- BOTSWANA, chem. anal. of rocks, ores, and minerals, 75-316; gneisses and granitoid rocks, 75-3641; *Dukwe* and *Tlala-Mabele*, geol. of area, 75-566; *Tati*, deformation in greenstone belt, 75-2716
- Boulangerite, synthesis, 75-3210; *Germany*, 75-934; *Turkey*, 75-973; *Brazil*, inclusions in quartz, 75-1338
- Boulder clay, *Russian SFSR*, origin related to planoconvex boulders, 75-1548
- Bournonite, *Germany*, 75-934; *Turkey*, 75-973
- Brackebuschite, *Western Australia*, 75-3886
- Braided stream structures, *Norway*, 75-153
- Brannerite, phase changes on heating, 75-1027, 2105; *Ontario*, associated with native Au, 75-3552
- Bransfield Strait v. Antarctica*
- Braunite, *Germany*, 75-2407
- Bravoite, *Derbyshire*, anal., 75-545; *Italy*, 75-1360
- BRAZIL, minerals, book, 75-2906; continental margin, 75-2903 [32]; colour centres in amethyst quartz, 75-497; gaseous inclusions in diamond, 75-510; boulangerite inclusions in quartz, 75-1338; *N.E. tungsten deposits*, economic potential, 75-966; *Atlantic margin*, ancient metamorphic-migmatite belts, 75-1420; *Alto Candeias*, phenakite and nigerite in quartz-cassiterite veins, 75-967; *Amapá*, nigerite in tin-tantalite pegmatites, 75-233; *Bahia*, emerald deposits, 75-2184; U and Th in rhyolites,

- ZIL (*contd.*)
 75-2239; *Campo Formoso*, stratiform
 promite, 75-989; *Brazilian Shield*,
 geochem. of Early Precambrian carbonate
 rocks, 75-385; thallium in deep-seated
 crustal rocks, 75-330; *Carnaiba mine*,
 emeralds, opt., 75-3309; *Goiaz, Serra*
de Canghala, impact origin of crater,
 75-1282; *Lafayette and Serro Do Navio*,
 in deposits, amphibolites from, 75-
 1117; *Matto Grosso, Araguinha Dome*,
 impact origin, 75-1282; *Minas Gerais*,
 new green beryl, 75-1085; iron-forma-
 tion, 75-2015; *Golconda mines*, herderite,
 75-896; *Niquelandia and Jacupiranga*,
 di-montmorillonites, chlorites, schu-
 hardite, 75-2955; *Rio de Janeiro*,
 ultrametamorphism and melting of
 continental margin, 75-677; *Rio Negro*,
 recent sediments, 75-2903 [12];
Antana de Encoberto, euclase, new
 locality, 75-1108
 cia, lunar, with chondritic texture,
 75-1249; clast groups, 75-2347; con-
 taining ilmenite and armalcolite, 75-
 119; Apollo 14, $^{40}\text{Ar}/^{39}\text{Ar}$ ages and
 trace elements, 75-421; terrestrial, pipes
 formed by exsolved magmatic vapour,
 75-1509; *Co. Wicklow*, igneous, 75-576;
Russian SFSR, conglomeratic dykes,
 75-3738; in mafic volcanic rocks, 75-
 1500; *Missouri*, sulphide-limestone flow
 breccia, 75-623; *Labrador*, mid-Mesozoic,
 75-3804; *Saskatchewan*, ores in collapsed
 pipes, 75-3068; *Greenland*, extrusive
 and intrusive, 75-3655
 thaupite, *Russian SFSR*, 75-706
 urite, in San Cristobal meteorite, 75-1267
 e, calcite and aragonite precipitation,
 75-2120; magnesium-bearing, in extrac-
 tion of iron from dolerites, 75-350; *NE*
England, from Coal Measures, geochem.,
 75-3401; *Red Sea*, brine pools, 75-1955;
China, boron in salt lakes, 75-1204
British Columbia v. Canada
 ITISH ISLES, structural development,
 75-2903 [25]; 1974 mineral statistics,
 75-1953; mineral resources, exploitation
 and countryside conservation, 75-197;
 records of underground workings, 75-
 3078; sulphur resources, 75-234; talc
 deposits, 75-2047; evolution of Tertiary
 intrusive centres, 75-1489; metallo-
 genesis within southern Caledonides,
 75-1982
 little micas, synthesis and solid solubility,
 75-3273
 oadlands *v. New Zealand*
 ochantite, *Sardinia*, thermal anal., etc.,
 75-2508
 oken Hill, *NSW v. Australia*
 omellite, crystal growth, 75-3242; *USSR*,
 75-1351
 omine, distribution in halite, sylvine,
 and carnallite, 75-2128; *Germany*, in
 salt sections from Zechstein horizon,
 75-371; *Poland*, in hydrothermal fluids,
 75-331; *Russian SFSR*, in groundwater,
 75-395; distribution between sylvine and
 halite, 75-3587; *Mediterranean Sea*, in
 halite, 75-1180; *Iraq*, indicator of oil
 migration, 75-1216; *USA*, distribution
 in well cuttings, 75-2060
 omymite, *Colorado*, 75-2766
 onzite *v. pyroxene*
 okite, *Austria*, in Alpine rocks, 75-1680
 icite, high pressure crystal growth, 75-
 3197; decomposition, 75-3159; *Scotland*,
 marble, chem. and economic aspects,
 75-1980
 Brucite, evolution in metamorphosed
 magnesium carbonate rocks, 75-656
 Bruggenite, *Chile*, new mineral from nitrate
 deposits, opt., X-ray, 75-1389
 Brushite, in human pathology, 75-2515
 Buddingtonite *v. feldspar*
 Buffer intensities and pH equilibrium of
 minerals and soils, 75-2923
 Buhrstone, *USA*, 75-638
 Bükk Mts. *v. Hungary*
 BULGARIA, Precambrian tectonics, 75-
 1415; *Madan, Borieva mine*, cupriferous
 bianchite, 75-1368; *Svidnya*, potassium-
 alkaline magmatites, amphiboles from,
 75-1311
 Burbankite, *Quebec*, chem., opt., X-ray,
 75-3581
 BURMA, lavender jade, 75-1300; inclusions
 in ruby, 75-1078; *Bawdwin mine*, Cu-
 Ni-Co mineralization, 75-3106; *Katha*,
 Ge, Ti, and As-bearing sphalerite, 75-
 2492; *Sabetaung*, geol. and Cu deposit,
 75-3107; *Shantaung-U-Thandawmywet*,
 metamorphic petrol., structures and
 mineral resources, 75-3844
 Bursait, *Turkey*, reflectance and micro-
 hardness, 75-2506
 Bustamite, *New South Wales*, 75-3112; *New*
Jersey, compositional limits, 75-3478
 Butler Hill, *Missouri v. USA*
 Butylammonium complexes, IR and X-ray
 study, 75-110
 Byam Martin I., *NWT v. Canada*
 Byrapur *v. India*
 Cacozenite, *Germany*, 75-2756
 Cadmium, mass spectrometric detn. in
 standard rocks, 75-53; in meteorites,
 75-1260; *South West Africa*, wind-
 borne, effect on geochem. prospecting,
 75-2336
 — compounds and minerals, Cd-pectolite,
 crystal structure, 75-149; $\text{Cd}_2(\text{PO}_4)_2$,
 isostructural with wagnerite, 75-3058;
 Cd I_2 polytypes, 75-1878
 Caesium, neutron-activation anal. in ultra-
 mafic rocks, 75-38; partitioning between
 clinopyroxene and liquid, 75-1058;
 distribution in potassium salts, 75-2127
 — compounds and minerals, halides,
 Debye-Waller factors, 75-3063; synthesis
 and thermal expansion, 75-3304
 Calabria *v. Italy*
 Calcareous rocks, *Poland*, from coal basin,
 75-3786
 Calciouranoite, new mineral, anal., opt.,
 X-ray, 75-548
 Calcite, synthesis, 75-1060; crystallization
 history, 75-3573; staining, detn. of
 ferrous iron, 75-1772; pore filling in
 septarian veins, 75-3574; compression,
 75-1045; EDTA dissolution, 75-2889;
 subsolidus and melting relationships,
 75-2117; displacive transformation at
 15 kb, 75-3047; phase relations, 75-
 1073; phase relations, 75-2080; phos-
 phate interaction, 75-3235; reaction
 with quartz, 75-3259; precipitated in
 brines, 75-2120; Mg ion concentration
 in aqueous solutions, 75-1014; solubility
 in ocean waters, 75-390; enlargement
 of twinning layer, 75-272; crystal
 growth in aerobic conditions, 75-3228;
 fractionation of oxygen isotopes with
 CO_2 , 75-271; dolomitization, 75-3142
 (IV. 10); equilibrium with dolomite,
 75-2121; in human pathology, 75-
 2515; *Germany*, 75-202; 'excentriques',
 75-1369; *Austria*, 75-1682; *Austria/*
Italy, petrog. and trace elements, 75-
 1374; *Poland*, in epigenetic formation,
 75-641; *Russian SFSR*, blue colour,
 75-3048; *Ukrainian SSR*, in zoned chert
 concretions, 75-3792; *Dead Sea*, 75-
 2053; *Tyrrhenian Sea*, magnesium, deep-
 sea, 75-2511; *India*, diagenetic rhom-
 bohedral, 75-636; *New South Wales*,
 with ankerite, as geothermometer,
 75-536; *Arizona*, onyx, 75-2771;
Colorado, in oil shale, 75-1370;
Nevada, oxygen isotope ratios, 75-
 2208; *New York*, borders on dolomite
 crystals, 75-3572; *Pennsylvania*, vein
 containing polygorskite, 75-2983; *Texas*,
 in skarn; *Virginia*, stalactite, 75-1367;
Ontario, C and O isotopes, Mg fractiona-
 tion, 75-384
 — magnesium, dissolution characteristics,
 75-3229; precipitation from super-
 saturated sea-water, 75-2512; *Austria*,
 rare earths in, 75-2286; *Great Bahama*
bank, in lime muds, 75-2677
 Calcium, XRF detn. in ilmenite, 75-1783;
 in ores and industrial products, 75-1781;
 photometric detn. in igneous rocks,
 75-1757; Ca-Y relationships in rocks
 and minerals, 75-1127; distribution
 between scapolite and plagioclase, 75-
 2450; *Italy*, in ultramafic rocks, 75-
 1441; *South Pacific*, carbonate alkalinity,
 75-2309
 — compounds and minerals, detn. of lime
 in iron ore by AAS, 75-1758; CaCO_3
 analysis in small samples, 75-2885;
 CaCO_3 phases, nucleation and crystal
 growth, 75-1046; $\text{CaCO}_3 \cdot 6\text{H}_2\text{O}$ stability,
 75-2119; crystal structure of CaCO_3 (II),
 75-3047; CaCO_3 retention in super-
 saturated sea-water, 75-3225; CaCO_3
 dissolution in sea-water; 75-3226,
 3227; rare earths in calcium carbonate,
 75-1144; $\text{Ca}(\text{OH})_2$ crystal growth during
 hydration of Ca_3SiO_5 , 75-3207; CaSO_4
 high pressure polymorph, 75-3219;
 CaSO_4 high-temp. phase, 75-1042;
 anal. of CaF_2 in fluorspar, 75-761;
 $\beta\text{-2CaO} \cdot \text{SiO}_2$ hydration, 75-3260;
 dicalcium silicate, melting relations, 75-
 3165; formation of Ca silicates in marine
 sediments, 75-259; $\text{Ca}_5(\text{SiO}_4)_2\text{SO}_4$
 crystal structure, 75-1916; $\text{Ca}_5(\text{VO}_4)_3$
 structure refinement, 75-178; *Pacific*
Ocean, CaCO_3 in surface sediments,
 75-1578; *Louisiana*, CaCO_3 nodules, C
 isotopes, 75-3390
 Calc-silicate bands, 'mobile components',
 75-3850
 Caliche, *Barbados*, profiles, 75-2676
 California *v. USA*
 Callaway Co., *Missouri v. USA*
 Cambay, *Gulf of v. India*
 CAMEROON, Mt. Manengouba, hypo-
 volcanic rocks, 75-3698
 Camp-Berteaux *v. Morocco*
 CANADA, mineral exploration, 75-1976;
 stratiform Cu deposits, 75-908; niobium
 and tantalum deposits, 75-2001; east,
 continental margins, 75-2903 [28]; west,
 P-wave residuals, 75-3882; *Canadian*
Shield, Archaean iron-formations and
 tectonic basins, 75-2013; ages of iron-
 formations, 75-1721; *Cobalt-Belleterre-*
Timmins, Kirkland Lake-Noranda-Val
d'Or, mineral and rock occurrences,
 book, 75-707; *Gulf of St. Lawrence*,
 methane-rich Recent sedimentary
 basin, 75-339; suspended particulate
 matter, 75-1586; trace metals in water,
 75-1194; *Rocky Mts.*, rank studies of
 coals, 75-2668

CANADA (contd.)

- , ALBERTA, palaeomagnetism from Belt-Purcell supergroup, 75-3874; laumontite and Ba-Sr heulandite, 75-3528; *Rocky Mts.*, rock fabric and jointing, 75-1434, 1435; *Sturgeon-Mitsue area*, evolution of Middle and Upper Devonian sequence, 75-3803; *Yarrow and Spion Creeks*, Cu deposits, 75-2000
 - , BRITISH COLUMBIA, Tertiary thermal event, 75-1433; ilherzolite nodules in basalts, 75-1478; K/Ar ages of Similkameen batholith and Kruger alkalic complex, 75-1435; *Babine Lake*, porphyry copper deposits, 75-3340; *Bennett Lake*, cauldron subsidence complex, 75-3741; *Mt. Edziza* volcanic complex, stratigraphy and palaeomagnetism, 75-3675; aeginitite in peralkaline rocks, 75-466; *Pinchi Lake*, K/Ar dating of blueschists, 75-741; *Prince Rupert*, palaeomagnetism of plutons, 75-1665; *Rossland*, age of sulphide mineralization, 75-3116; 3117; *Sustut and Sifton* basins, sedimentary history and tectonics, 75-3651; *Tulameen R.*, tulameenite, new mineral, 75-3605; platiniridium, etc., 75-3534; ultramafic-gabbro complex, palaeomagnetism, 75-696; *Vancouver I.*, zircon ages of west coast crystalline complex, 75-2840; structure and tectonics of continental slope, 75-1527; *Alert Bay-Cape Scott* areas, geol. and mineral deposits, 75-2557
 - , LABRADOR, mid-Mesozoic breccia, 75-3804; *Kinglapait* intrusion, feldspars from, 75-3515; *Labrador Shelf*, methane in Recent sediments, 75-1221; *Michikamau* intrusion, chilled margin phase equilibria, 75-255; *Nain*, anorthosite massif, pyroxene-olivine-quartz assemblages, 75-602; *Tabor I.*, labradorite exsolution, 75-1328
 - , MANITOBA, *Bird R.*, argentic pentlandite, 75-3556; *Flin Flon and Snow Lake* districts, sphalerite geobarometry, 75-3114; sedimentology of Missi group, 75-1581; *Lac du Bonnet*, Rb/Sr age of quartz monzonite, 75-2839; *Lynn Lake and Thompson*, violarite in Ni ores, 75-3557; *Odd West* pegmatite, tapiolite, stibiotantalite, and antimonium micro-lite, 75-3548
 - , NEW BRUNSWICK, age of Acadian deformation, 75-740; *Bathurst*, Caribou stratabound deposits, deformation history, 75-983, 984; *Bathurst-Jacquet R.* district, U in stream sediments, 75-413; *Bay of Fundy*, zoned plagioclase from *Grandmanan* tholeiite sheet, 75-1329; *Nigadoo R.*, base metal deposit, 75-2041; *St. John*, stromatolite from Green Head group, 75-1585; *Tetagoche Lakes, Bathurst, and Nepisiguit Falls* areas, geol., 75-3642
 - , NEWFOUNDLAND, Sokoman formation, stratigraphy and mineralogy, 75-221; Mesozoic alkaline intrusives, 75-1479; Late Jurassic mafic pluton, 75-1480; coarse-grained rutile, 75-3536; stratigraphy of *Fleur de Lys* supergroup, 75-2696; plateau lavas and diabase dykes, 75-2627; prehnite and pumpellyite-bearing mineral assemblages, 75-1642; origin and deformation of *Fleur de Lys* metaconglomerate, 75-1641; *Conception Bay*, geochem. of bottom sediments, 75-359; *Lush's Bight* terrain, age of Brighton hornblende gabbro complex, 75-738
 - , NOVA SCOTIA, age of Keppoch Formation, 75-739; boron in tills and shelf sediments, 75-358; salt basins, 75-3138; evaporites, 75-3139; *Cape Breton I.*, coexisting basaltic and granitic magmas, 75-3355; *Cape Sable*, continental shelf gravity survey, 75-1436; *Wallace*, sylvite and carnallite-bearing rocks, 75-2064
 - , NORTH-WEST TERRITORIES, *Baffin Bay*, continental margins, 75-2903 [28]; sediments, chem. of interstitial waters, 75-3404; *Baffin I.*, water quality studies, 75-2299; *Banks I.*, manganese spherulites, 75-3324; *Bathurst I.*, interglacial peat deposits, dating, 75-736; *Bathurst I. & Byam Martin I.*, geol., 75-3650; *Echo Bay*, U-Ni-Ag-Cu deposits, 75-1148; *Ellesmere I.*, Rb/Sr ages of metamorphic rocks, 75-2835; metamorphic and plutonic rocks, 75-3649; *Franklin, Little Cornwallis I.*, Pb-Zn deposit, 75-414; *Franklin and Mackenzie*, diabases, palaeomagnetism, 75-1667; *Ghost Lake*, Pb isotope ratios and crustal evolution of Slave Craton, 75-16; *High Lake, Yellowknife and Indin Lake*, sulphur in Archaean volcanic rocks, 75-315; *Keewatin*, geochron. of Archaean and Proterozoic rocks, 75-2838; *Last Lake*, shallow marine plateau basalts, 75-603; *Kaminak Lake*, exploration for Archaean polymetallic sulphide deposits, 75-415; *Mackenzie*, cordierite distortion index, 75-3467; *Mackenzie Valley*, seismological data, 75-1666; *Bear-Slave operation*, uranium content, 75-416; *Muscox* intrusion, chilled margin phase equilibria, 75-255; *Slave* structural province, geochem. studies, 75-412; *Yellowknife*, biotite in Archaean meta-sediments, 75-474; RE elements in Archaean volcanic rocks, 75-345; cordierite isograd in Archaean meta-sediments, 75-646; fine structure of crust, 75-1671; crystallization of garnet, 75-3455; cumingtonite, 75-3486
 - , ONTARIO, S isotopes in Precambrian sulphates and sulphides, 75-1183; porphyry Mo-Cu mineralization, 75-2326; Grenville prov., coexisting metamorphic calcite and dolomite, 75-384; syn-orogenic igneous alkaline rocks, 75-2589; spencite, 75-3465; *Bancroft*, collecting trip, 75-708; *Big Creek and Big Otter Creek* basins, ground-water flow systems, 75-1213; *Bijou Point*, Archaean rocks with shoshonitic affinities, 75-1457; *Chandos Township*, garnet-cordierite-sillimanite gneisses, 75-2723; *Cobalt*, chlorites in native silver deposits, 75-482; *Evans-Lou mine*, caysichite, new mineral, 75-3594; *Frood mine*, pentlandite, 75-3555; *Lake Ontario, Bay of Quinte*, surficial sediments, 75-1587; *n. Lake Superior*, palaeomagnetic reversal in Osler volcanic group, 75-1670; *Leitrim, Gloucester* fault, mapping, 75-1658; *Madoc*, fluorite deposits, 75-2324; *Michipicoten I.*, Keweenaw volcanic rocks, 75-3676; *Muskoka-southern Georgian Bay*, polycrystalline pseudomorph gauges of palaeostress, 75-1640; *Red Lake-Uchi Lake*, organic-rich lake sediment, 75-2266; *Rice Lake area*, Hg and Au in Archaean rocks, 75-1230; *Richardson mine*, brannerite, 75-3552; *Seymour iron mine*, ferrimolybdate, 75-3889; *Sudbury*, Pt-group minerals, 75-1968; mineral grain internal inhomogeneity, 75-673; violarite in Ni-ores, 75-3557; *Copper Cliff*, michenerite, 75-3041; *Strathcona mine*, cubanite, 75-1931, 1932; *Sudbury and Timmins*, magnetic anisotropy of sulphides, 75-2751; *Temagami* Cu deposit, temagamite, new mineral, 75-3604; *Upper Kettle Creek*, chem. variations in ground-waters, 75-394
 - , QUEBEC, Chibougamau greenstone belt, Rb/Sr dating, 75-737; Morin anorthosite pluton, time-stratigraphic relationships, 75-2836; pre-Kenoran gneisses, biotite and hornblende ages, 75-2837; Grenville province, changes across orthopyroxene isograd, 75-3847; *Abitibi, RE* elements in Archaean volcanic rocks, 75-345; *Beaumont-Bic*, Lower Palaeozoic flysch sandstones and conglomerates, 75-1582; *Charlevoix*, crypto explosion structure, palaeomagnetism of anorthosite, 75-694; *Chibougamau*, conglomeratic rocks, 75-1584; *Knob Lake area*, Sokoman formation, stratigraphy and mineralogy, 75-221, *Lièvre R.*, discovery of apatite, 75-2759; *Mattagami*, mattagamite and tellurantimony, new minerals, 75-3600; *Mont St. Laurent*, lemoynite, 75-3006; ancyllite, 75-3052; burbankite, 75-3581; gaidonnayite, new mineral, 75-3596; *Monteregian Hills*, geochem. data, 75-760; Morin anorthosite complex, differentiation, 75-601; *Noranda*, sulphur in Archaean volcanic rocks, 75-315; *Horne mine*, volcanic origin, 75-981, 982; *Opemiska Lake* granite pluton, petrol., 75-3359, 3708; *Quebec city*, prehnite and pumpellyite-bearing mineral assemblages, 75-1642; *St. Lawrence tidal flats*, polished and striated mud surfaces, 75-637; *Shawinigan falls*, Ni-Cu enrichment of intrusive complex, 75-2327; *Sokoman* iron formation, facies types and environment, 75-3091; *Upper Chaudière Valley*, Pleistocene clastic dyke, 75-1583; *Villedieu Township*, vlasovite, 75-3492; *West Clearwater Lake*, impact crater glass, 75-435
 - , SASKATCHEWAN, ores in collapsed breccia pipes, 75-3068; *Beaverlodge*, geochem. of surficial environment, 75-2323; *Rabbit Lake*, heavy rare gases in old uranium deposit, 75-2318; *Saskatoon*, palaeosols, 75-846
 - , YUKON, seismological data, 75-1666; *Aishihik Lake, Snag, Stewart R.* areas, reconnaissance geol., 75-2556; *Bennett Lake* cauldron subsidence complex, 75-3741; *Mt. Nansen*, stream sediment geochem., 75-2332
- Canary Is. v. Atlantic Ocean
Cancrinite, nitrate-, breakdown product of scapolite, 75-300
Canfieldite, Czechoslovakia, anal., 75-3560
Canterbury v. New Zealand
Cape Province v. South Africa
Cape Sable, Nova Scotia v. Canada
Cape Verde Is. v. Atlantic Ocean
Cappelenite, Kazakhstan, anal., opt., X-ray, 75-3468
Carbide, formation from lunar iron silicates, 75-1240
Carbon, coulometric detn., 75-37; film thickness in electron probe analysis, 75-778; in lunar fines, 75-422; in rusty

- on (contd.)
- unar rock, 75-1253; accumulation in unar soils, 75-2352; organic, in recent sediments, titration method, 75-2888; detn. in modern carbonate sediments, 75-2886
- dioxide, interlamellar adsorption by smectites, 75-84; source of oxygen in metasomatism of carbonates, 75-3385; release from olivine, 75-2396; in genesis of olivine melilite, 75-2144; inclusions in olivine, 75-1285; accumulation in atmosphere and sea, 75-1218; *West Siberia*, geochem. in Jurassic sediments, 75-404
- isotopes, in Precambrian sedimentary carbonates, 75-3389; ^{14}C dating calibration, 75-2302; in carbonate concretions, 75-2263; in long-stored deep-sea sediments, 75-1528; stable in carbonated ground waters, 75-1198; in coexisting metamorphic calcite and dolomite, 75-3384; *France*, *Gulf of Lions*, in sediments 75-2258; *Poland*, origin of sulphur deposits, 75-1149; *Baltic Sea*, in Recent sediments, 75-366; *North Atlantic*, ^{14}C activity in water, 75-2301, 2305; *North Pacific*, ^{14}C profiles, 75-2304; in altered carbonates, 75-1577; *Louisiana*, in calcium carbonate nodules, 75-3390
- bon furnace atomiser, in atomic absorption spectrometry, for detn. of Pb, 75-42
- bon rod atomiser, in atomic absorption spectrometry, for detn. of Ag and Au, 75-767, 768
- bonates, sedimentary, C and O isotopes in, 75-3389; sodium, in sediments and rocks, 75-3386; metasomatism, source of oxygen, 75-3385; Holocene sediments of continental shelves, 75-2903 [11]; detn. in calcareous sediments and sedimentary rocks, 75-2887; sediments, detn. of organic carbon, 75-2886; origin of pseudopellets, 75-3772; concretions, C isotopes and Mn in, 75-2263; concretions, radiocarbon dating, 75-2804; in pelagic sediments, 75-2262; co-existing equilibrium, 75-2121; chem. detn. in carbonate rocks, 75-1771; solubility in ocean waters, 75-390; *Spain*, glauconite-phosphate association, 75-3387; *Germany*, Cu-, formation, 75-2118; *Poland*, chem. and mineral composition, 75-2658; *Carpathian Mts.*, Mesozoic, element fractionation, 75-3393; *Belorussian* lake basins, Holocene accumulation, 75-367; *West Indies*, diagenesis of marine sediment, 75-2678; *South Pacific*, alkalinity of sea-water, 75-2309; altered, C and O isotopes, 75-1577; *Alabama*, petrol. of core, 75-2669; *California*, silica-carbonate alteration of serpentine, 75-964; *Colorado*, in oil shale, 75-1370; *Utah*, sedimentation controlled by salinity, 75-2673
- carbonate deposits, *S. France*, petrog. and palaeo-environment, 75-1543
- formations, *Poland*, Upper Jurassic, 75-626
- minerals, IR spectrum, 75-59
- liquids, Sr distribution with silicate liquids, 75-2084
- rocks, source rock for petroleum, 75-3322; phase relations, 75-3162; Mg and Fe distribution in rocks and cements, 75-2261; O isotopes in feldspars, 75-2231; CO_2 detn., 75-1771; AAS detn. of Pb, 75-42; *Scotland*, isotope studies, 75-376; *Swiss Alps*, 75-3867; *Czechoslovakia*, in Early Palaeozoic deposits, 75-939; *Israel*, origin, 75-2606; *Antarctica*, non-marine, Sr isotope compositions, 75-2829; *Appalachian Mts.*, chem. and palaeotemperature data, 75-375; *Nevada*, facies relationships, 75-3807; *Brazil*, geochem., 75-385; *Guatemala*, Pb-Zn mineralization, 75-3095
- sands, *Morocco*, Tepee structures, 75-1544
- Carbonatite, in sedimentary rocks, carbon in ankerite, 75-1173; porphyritic textures, 75-3678; *Finland*, age, 75-2805; complex containing richterite and actinolite, 75-3489; tetraferriphlogopite from, 75-3495; *Israel*, petrogen., 75-2605; *Russian SFSR*, temperature facies of metasomatites, 75-1599; *India*, stratigraphic position, 75-581
- Carbowax-impregnated clays, minimizing spherulitic formation, 75-75
- Carlitesite, *Mexico*, new mineral, X-ray, opt., 75-3593
- Carnallite, Br, Rb partitioning, 75-2128; *Dead Sea*, 75-2053; *Nova Scotia*, carnallite-bearing rocks, 75-2064
- Carnegieite-nepheline transition, 75-2179
- Carnelian, heat treatment, 75-2189, 2190
- Carnsore v. Ireland*
- Carpholite, *USSR*, anal., opt., X-ray, 75-3491
- Carpathian Mts. v. Poland, Europe*
- Carrigounnel, *Limerick v. Ireland*
- Cassiterite, identification by 'tinning test', 75-1773; minimal reflectivity angle, 75-2738; *Cornwall*, 75-2017; *Portugal*, in pegmatite, 75-2018; *USSR*, 75-212; *Russian SFSR*, in placer deposits, 75-3089; *Baltic Sea*, placer deposits, 75-204; *Algeria*, 75-1348; *China*, 75-3108; *Brazil*, pegmatite veins containing phenakite and nigerite, 75-967
- Catazonal xenoliths, *France*, in Neogene volcanics, 75-659
- Cations, partitioning between coexisting phases, 75-1130
- Caucasus, Russian SFSR v. USSR*
- Cauldron, *Glencoe, Scotland*, evolution, 75-2594
- Caysichite, *Ontario*, new mineral, X-ray, opt., 75-3594
- Celadonite v. mica
- Celestine, synthesis, 75-2113; indication of vanished evaporites, 75-3569; in prepn. of SrCl_2 , 75-2051; *Avon*, deposits, 75-3331; *Western Australia*, 75-3886; *Brazil*, pale blue, opt., 75-1109
- Celsian, phase relations, 75-3289, 3290; *Czechoslovakia*, in quartzite, 75-3517
- Cements, IR spectra, 75-59; volume reduction and pressure-solution generation, 75-3773; electron microscopy and X-ray diffraction of crystals, 75-2869
- Cencenighe-Garès v. Italy*
- CENTRAL AFRICAN REPUBLIC, trace elements in kaolinite, 75-1852
- CENTRAL AMERICA, volcanoes, fumarole incrustations, 75-606; identification of volcano-tectonic fault, 75-3754; Cl, F and SO_2 in volcanic gases, 75-3753; Quaternary volcanic and tectonic segmentation, 75-3752; earthquakes and volcanic eruptions, 1961-1972, 75-3751
- Ceramics, IR spectra, 75-59; emanation thermal analysis, 75-1797; XRF detn. of Fl, 75-1784; anorthosite as raw material, 75-990, 991
- Cerolite, serpentine component, 75-486; *Kazakhstan*, opt., 75-1861
- Cerussite, structure refinement, 75-892; *Germany*, 75-202; *Arizona*, 75-231
- Cervantite, *Queensland*, 75-980
- Cesbronite, *Mexico*, new mineral, anal., opt., X-ray, 75-549
- Cévennes v. France*
- Chabazite v. zeolite
- CHAD, *Lake Chad*, northupite, 75-3885; stability of montmorillonite, 75-2934
- Chalcanthite, synthetic, crystal habit, 75-1044; Cu^{2+} optical absorption spectra, 75-3050
- Chalcedony, *Arctic Ocean*, length-slow, 75-2457; *Texas*, replacing fossils, 75-3521; *Virginia*, replacing gypsum, 75-1367; *Mexico*, on mordenite fibres, 75-3523
- Chalcocite, *Poland*, in quartz vein, 75-2021; *India*, 75-1996; *Zaire*, 75-975; *Australia*, 75-952; *Burma*, 75-3107
- Chalconatronite, *Western Australia*, 75-3886
- Chalcopyrite, topotactic transformation to ZnMn_3O_7 , 75-143; *Poland*, from Zn-Pb deposits, anal., opt., 75-2450; *New Jersey*, oriented transformation, 75-264
- Chalcopyrite, synthesis, 75-1029, 1030; DTA, 75-526; diffusion of sulphur, 75-1031; *Wales*, 75-932; *Sutherland*, 75-930; *Germany*, 75-934, 937, 2755; *Switzerland*, 75-3104, 3105; *Norway*, 75-2016; *Poland*, in epigenetic formation, 75-641; *USSR*, 75-947; polygenetic deposits, 75-205; *Russian SFSR*, 75-2027; explosion breccia deposit, 75-1500; *Greece*, 75-2022; *Turkey*, 75-972, 973, 1990; *India*, 75-1996; *Burma*, 75-3107; *Zaire*, 75-975; *Australia*, 75-952; *Colorado*, 75-988; *New York*, 75-3312; *Virginia*, 75-2496; *Washington*, mineralization and alteration in granodiorite, 75-2044; *Peru*, 75-2010
- Chalcotibite, synth., DTA, 75-532; *Russian SFSR*, 75-1397; *Greenland*, 75-2497
- Chalk, *SE England*, strength, compressibility and density trends, 75-1656
- Chambersite, first *USSR* find, X-ray, 75-1382
- Chamosite, chloritoid breakdown product, 75-277
- CHANNEL ISLANDS, *Jersey*, mica-lamprophyres, 75-3357
- Charnockites, nomenclature, 75-2689; ortho- and para-, discrimination, 75-2690; *France*, charnockite-granulite suite, 75-659; *Russian SFSR*, hasting-site from, 75-3487; *India*, 75-2720; colour, 75-668; minerals in, 75-488; *Surinam*, associated with granulites, 75-676
- Chavaniac v. France*
- Chemical phase analysis, book, 75-74
- Chernykhite, PMR structure data, 75-1903
- Cherts, spongy, origin, 75-2674; coating on quartz, 75-2653; deep-sea formations, cristobalite from, 75-3522; *India*, bands in chromites, 75-633; *Oregon*, derived from magadiite, 75-1588; *Canada*, 75-221
- Cheto, Arizona v. USA*
- Chevkinite, synth. Mg- and Co-, structures, 75-1915; *USSR*, 75-212
- Chibougamau, Quebec v. Canada*
- CHILE, geol. of Pacific continental margin, 75-2903 [42], quenstedtite, crystal structure, 75-175; porphyry Cu deposits, 75-1972; molybdate absorption by soils, 75-2945
- Chuquicamata*, belling-erite, structure, 75-184; *Pampa Pique III*, brüggenite, from nitrate deposits, 75-1389
- CHINA, tectonic features and developments,

CHINA—(contd.)

- 75-570; boron in salt lake brine, 75-1204; taiyite, new aeschynite-priorite variety, 75-1352; stress distribution in crust, 75-1425; glaucophane in fracture zones, 75-1634; precious metals in skarns and hydrothermal Cu deposits, 75-1998; tin and tungsten deposits, 75-2031; temp. of ore formation and diagenesis, 75-2032; vanadium minerals in black shale, 75-2403; spodumene pegmatite, 75-2418; new Pt group minerals, 75-2522; new palladium minerals, 75-2529; chromite deposits, 75-3076; Ta, Nb, W, Be-mineralized granite, 75-3108; potash deposits in salt lake, 75-3128; balipholite, new mineral, 75-3589; Pt metals in Mo deposits, 75-3566; *Honan*, chrome phlogopite, 75-475; *Kwangsi*, *Nantan Co.*, iron meteorite shower, 75-432; *Sinkiang*, *Turfanbasin*, trace elements in Mesozoic & Cainozoic sediments, 75-377; *Western Yunan*, Mesozoic granites, petrochem.-geochem. characteristics, 75-334; *Yangtze Valley*, ages of magmatic and metamorphic rocks, 75-15; layered basic-ultrabasic intrusives, 75-1449; Fe-Ti oxides from layered basic-ultrabasic intrusives, 75-515; chiolite, phase relations, 75-3238
- Chios v. Greece*
- Chkalovite, *Greenland*, anal., opt., X-ray, 75-1340
- Chlorargyrite, *New Zealand*, 75-2038
- Chloride, Cl-SO₄ ratios in atmospheric precipitation, 75-396
- Chlorine, in volcanic gases, 75-3753; substitution in synthetic silicates, 75-3280; X-ray spectrometric anal. in concrete, 75-777; *Poland*, in hydrothermal fluids, 75-331; *Russian SFSR*, in geological formations, 75-314
- Chlorites, crystal chemistry, 75-2436; coating on quartz, 75-2653; oceanic distribution, 75-1551; free energy of formation, 75-1063; Mg ion concentration in aqueous solutions, 75-1014; experimental transformation to vermiculite, 75-819; *France*, *Golfe du Lion*, in sediments, 75-832; *Italy*, from granite, 75-2437; *Belgium*, Li-bearing Al regular mixed layer montmorillonite-chlorite, 75-830; *Norway*, 75-1595; *Russian SFSR*, films on silty sandstones, 75-2667; in metapelite schist, 75-2713; *India*, from greenschists, 75-481; *Japan*, 75-1635; interstratified with vermiculite in red shale, 75-1862; with Fe-saponite in pillow lava, 75-1863; clay minerals in sandstone, 75-1864; local chemical heterogeneity, anal., opt., 75-483; *Mozambique*, dioctahedral, in pegmatite, 75-2419; *New Caledonia*, 75-3504; *North America*, 75-1642; *California*, properties of 'swelling chlorite', 75-96; *New Jersey*, Zn-rich, chem., 75-3592; *Oklahoma*, mixed-layer chlorite-montmorillonite, 75-845; *Washington*, anal., 75-517; *N. W. Territories*, in Archaean meta-sediments, 75-646; *Ontario*, associated with native silver deposits, 75-482; *Brazil*, 75-2955
- Chloritoid, stability at fluid pressures <10 kbars, 75-277; *Ireland*, in schist, 75-452; *Switzerland*, 75-1617; *Russian SFSR*, formation in metapelite, 75-1631; *Crete*, in metapelites, 75-2712; *New Caledonia*, 75-3504
- Chlorotile, *Germany*, with mixite, 75-2505
- Chondrodite, detn. of boron, chem., 75-1286
- Chukotka, Russian SFSR v. USSR*
- Christmas Mts., Texas v. USA*
- Chromates, KFe(CrO₄)₂ · H₂O structure, 75-1924
- Chromatography, gas solid, kaolinite and bentonite stationary phases, 75-823; thin layer, Cr, Mn, Fe, Ni, Co, Cu ions on Kieselguhr G, 75-1795; infiltration metasomatism, 75-2086, 3152, 3153
- Chromite, high temp. reduction, 75-3200; detn. of sulphur and phosphorus, 75-2881; in Apollo 15 rake samples, 75-2342; in mesosiderites, 75-3440; photometric detn. of V, 75-1961; Fe²⁺ optical absorption spectra, 75-881; *Spain*, cordierite-chromite-niccolite ores, 75-1978; *Portugal*, fluid inclusions in 75-3543; *India*, from ultrabasic rocks, 75-2473; chert bands in, 75-633; *Western Australia*, alteration, 75-3542; *New Zealand*, 75-3472; *Pennsylvania-Maryland*, alteration during serpentinization, anal., 75-2474; *Washington*, alteration, anal., 75-517
- deposits, *Oman*, in ophiolite complex, 75-1993; *India*, kämmererite in, 75-484; *China*, potentiality, 75-3076
- Chromite, *South Africa*, mineralogy, chem., and reactivity, 75-3544; refractory nature, 75-3545; *Brazil*, stratiform layers, 75-989
- Chromium, emission-spectrographic detn. in silicate rocks, 75-1796; XRF detn. in ilmenite, 75-1783; detn. in iron ore by AAS, 75-1760; in lunar materials, 75-1257; optical absorption spectra in spinels, 75-3025; in halloysites, 75-1824; ions on Kieselguhr G, 75-1975; *France*, in sediments, 75-3376; *Italy*, in ultramafic rocks, 75-1441; abundance in volcanic rocks, 75-2252; *Russian SFSR*, in garnets from kimberlite, 75-446
- Chrysoberyl, paragenesis in pegmatites, 75-2409; *Algeria*, 75-1348
- Chrysocolla, *Australia*, 75-952
- Chrysotile v. olivine
- Chrysotile, in nickel silicates, 75-486; *Italy*, 'deweylite', 75-3498; *Japan*, 75-485; *New Caledonia*, from ultramafic belt, 75-477; Ni²⁺ optical absorption spectrum 75-3502
- Cinder cone, *Sicily*, *Mt. Etna*, development, 75-2634
- Cinematographic study of fluid inclusions in crystals, 75-756
- Cinnabar, crystal growth, 75-3215; phase equilibria, 75-1039; *Italy*, alluvial deposits, 75-926; *USSR*, mineralization in Triassic volcanic rocks, 75-206; *Russian SFSR*, 75-977, 2027; *Queensland*, 75-219
- Ciscaucasia, Russian SFSR v. USSR*
- Clarke Co., Virginia v. USA*
- Clastic material, distribution in coastal zone, 75-615
- Clays, grain analysis, 75-847; compaction, 75-825; heat treatment, 75-1065; DTA, of clay-organic molecule complexes, 75-1822; amorphous coatings on soil particles, 75-1831; marine, rare earths in, 75-1144; smearing on glass slides for X-ray diffraction, 75-793; X-ray diffraction, heating sample plate, 75-2919; interstratified, 75-1835; production of alumina from, 75-3119; containing amorphous materials, quantitative mineral analysis, 75-2946; removal of iron oxides and amorphous material, 75-2920; *London Clay*, X-ray study, 75-795; effect of separation method on DTA, X-ray diffraction, 75-2918; catalytic decomposition of organic molecules, 75-811; potassium selectivity, 75-90; minimizing spherulite formation in Carbowax-impregnated clays, 75-75; *Devon*, ball clay, ESR study, 75-804; *France*, *Mt. Aigoual*, from podzolic soils, 75-2976; *Bavaria*, deposits, 75-835; *Switzerland*, for foundry moulding sands, 75-2948; *Russian SFSR*, Sarmation, lithology and petrog., 75-1859; *Poland*, Oligocene, mineral assemblages, 75-1850; *Poznan* series, containing baryte concretions, 75-837; *India*, dykes in sedimentary iron ores, 75-2666; *Japan*, Mn in acid clay, 75-1818; *Pacific Ocean*, trace element geochem. of pelagic core, 75-1576; *California*, 75-1876; calcareous concretions, 75-2958; lone formation, radioelements and trace elements, 75-374; *Ohio*, use in rubber industry, 75-822
- minerals, book, 75-1810; layer structure, 75-1838; interstratification, electron microscopy, 75-79; UV spectroscopy of surface acidity, 75-81; gas sorption, 75-83; alteration of amino acids and polyhydric phenols, 75-368; organic matter on, 75-372; stability diagrams in aqueous solution, 75-802; stability in sea basins, 75-2978; oceanic distribution, 75-1551; gas chromatographic detn. of water, 75-1820, 1821; EPR and NMR techniques, 75-1881; formation on Mars, 75-2785; X-ray diffraction variation with sample size, 75-2916; changes in assemblages by sampler type, 75-2917; separation by electrophoresis, 75-2921; fixation of zinc, 75-2944; in system Al₂O₃-SiO₂-H₂O, 75-2947; *Austria*, 75-1682; *Poland*, in mottled clay horizon of *Poznan* series, 75-1849; *Norway*, min. & geochem., 75-1846; *Greece*, 75-2985; *Turkey*, in borate deposits, 75-1855; *Israel*, in Palaeozoic sediments, 75-1858; *Antarctica*, changes in deep-sea sediments, 75-2980; *Indian Ocean* sediments, 75-1569; *Japan*, in Neogene carbonate rocks, 75-123; of podzolic soils, 75-122; interstratified, 75-124; in Hekkaï formation, 75-130; in Kanto loam formation, 75-132; mineralogy and genetic environment of Osaka group, 75-131; in tuffaceous sandstone, 75-1864; in Recent marine sediments, 75-1867; in core samples, 75-1869; from pumice in volcanic ash soils, 75-1872; *Japan Sea*, in Recent sediments, 75-1575; *California*, 75-1876; *Hawaii*, hydrothermal origin, 75-135; *Mississippi coastal plains*, from silty soils, 75-137; *North Carolina*, distribution in Recent estuarine sediments, 75-2982; *Oklahoma*, mixed-layer mineral, 75-845; *Texas*, in deltaic sediments, 75-1875; *British Columbia*, from Lower Cretaceous shales, diagenesis, 75-843
- petrology, quantitative, 75-1815
- rocks, index of bituminoid reduction, 75-383
- suspensions, evaporating convection patterns in shallow pools, 75-101
- Claypits, *Missouri*, geochem. anomalies, 75-1133
- Clear Creek Co., Colorado v. USA*
- Clerici soln., hot, mineral separation, 75-749

- max Cave, Georgia v. USA
 nobisvanite, Western Australia, new mineral, anal., opt., X-ray, 75-550, 3886
 ochlore, upper stability at low pressure, 75-279
 ochrysotile, pecoraite, nickel analogue, 75-1320
 olumite, titaniferous, crystal structure, 75-3000
 ohypersthene v. pyroxene
 optilolite, Japan, anal., 75-502, 505;
 in zeolite rock, 75-649
 opyroxene v. pyroxene
 opyroxenite, Italy, inclusions in Triassic volcanic rocks, 75-1442; New South Wales, inclusions from diatremes, 75-572
 ozoisite, grain surface etching, 75-3458;
 India, from pegmatite, anal., opt., X-ray, 75-458
 incurry, Queensland v. Australia
 sure correlation, 75-1729
 al, detn. of ash content by beta back scattering, 75-781; chemical forms of sulphur in, 75-1785; detn. of Ga and Ge in, 75-1789; South Wales, geochem., 75-354; India, Ge content, 75-2230;
 Illinois, palaeosalinity indicator, 75-3375; Canada, rank studies, 75-2668
 basins, Pennsylvania, coalification patterns, 75-2668
 beds, germanium distribution, 75-1184
 , humic, experimental formation of hydrocarbons, 75-260
 measures, Poland, min. and petr. of borehole rocks, 75-3786; Russian SFSR, related to marine sediments, 75-1559
 east Land v. Antarctica
 salt, Ontario v. Canada
 balt, Co^{2+} in olivine, 75-144; geochem. affinity with metal, silicate, and sulphide phases, 75-1013; in pyrite, 75-1354; in pyrite, related to metamorphic grade, 75-523; spectrophotometric detn. in laterites, 75-2874; ions on Kieselguhr G, 75-1795; Italy, in ultramafic rocks, 75-1441; USSR, age of Ni-Co mineralization, 75-2825; Burma, Cu-Ni-Co mineralization, 75-3106
 — minerals and compounds, Co_2SiO_4 crystal structure, 75-145; Czechoslovakia, Co-arsenides, 75-2503
 obaltite, As content, 75-3142 (IV. 3); Wales, 75-932; Queensland, 75-2034
 obaltomenite, series with ashfieldite, opt., X-ray, 75-3565
 oesite, quartz transition, 75-2173; effect of shear, 75-3296; transformation from amorphous silica, 75-2175; 2176; USSR, Popigai meteorite crater, opt., 75-434
 coffinite, Wyoming, 75-1147
 ohenite, in Morasko meteorite, opt., 75-1262
 oimbra v. Portugal
 oke, detn. of Ga and Ge in, 75-1789
 olemannite, gemstone, opt., 75-1110;
 California, 75-714; pseudomorphous after inyoite, 75-2770
 oll, Argyllshire v. Scotland
 ollinsite, crystal structure, 75-1944;
 Western Australia, 75-3886
 olloids, prepn. of electron microscopy grids, 75-76
 ollophane, Kansas, 75-1591
 OLOMBIA, 'trapiçe emerald', 75-1890;
 Popayan-Cali, bauxite-alumina-aluminium economics, 75-965
 olorado v. USA
 oloradoite, Colorado, 75-223
 olumbia R. v. USA
 Columbite, X-ray and composition, 75-3547;
 in zoned pegmatite, 75-1679; Algeria, tantalian, 75-1348; China, manganian, anal., 75-3108
 Comb-layered rocks, crystals and differentiation, 75-3173
 Combustion, detn. of total sulphur in limestone, 75-36
 Comets, collisions and geological periods. 75-1284; encounters with Earth, 75-2370; new nucleus model, 75-1696;
 collision with small planet, 75-2371;
 Kohoutek, Bennet, Bradfield, Encke, multiband photometry, 75-2372;
 Kohoutek, spectrophotometry, 75-2373; H_2O and CH_4 in, 75-2374
 Computer, application to geophys. problems in mineral exploration, 75-914
 Conception Bay, Newfoundland v. Canada
 Concrete, identification of sulphates, 75-2883; X-ray spectrometric analysis, of Cl, 75-777
 Concretions, flattened shape, 75-1531
 Conductivity, anomalies in upper mantle, 75-1663; thermal, of semitransparent materials, 75-2725; electrical, of slags, 75-2090; Pacific Ocean, 75-697
 Cone-in-cone structure, India, from west Bokaro coalfield, 75-635
 Conglomerates, Poland, from coal basin, 75-3786; India, 75-1812; Michigan, Copper Harbor conglomerate, 75-1590; Quebec, 75-1582; glacial and paraglacial genesis, 75-1584
 Conicalcrite, Germany, 75-2755
 Continental drift, magmatic provinces and mantle plumes, 75-1512; metallic ore deposits, 75-905; oil and natural gas reserves, 75-906
 — evolution, RE patterns, 75-382
 — margins, geology, book, 75-2903; Brazil, ultrametamorphism and melting, 75-677
 Converse Co., Wyoming v. USA
 Cookeite, Africa, in petalite, chem., X-ray, 75-478
 Copal, thermal props., 75-1112
 Copper, Cu^{2+} optical spectra in spinels, 75-3185; Ag in concentrates, 75-2882; in pegmatites, 75-2758; liberation in plutonic igneous cycles, 75-1965; Cu^{2+} interference in AAS detn. of Hg, 75-1770; detn. in ores by AAS, 75-1778, in iron ore by AAS, 75-1758; substitution in tetrahedrites, 75-1647; ions on Kieselguhr G, 75-1795; low temp. geochem., 75-908;
 sorption by algal matter, 75-1203;
 adsorption on clay minerals and marine sediments, 75-372; stereochemistry of Cu(II) in bellingerite, 75-184; Cu(II) interactions with montmorillonite, 75-2929; adsorption of traces by bentonite, 75-113; SW England, distribution in granites, 75-3353; Belgium, accumulation in soils, 75-3419; Burma, Cu-Ni-Co mineralization, 75-3106; SW Africa, windborne, effect on geochem. prospecting, 75-2336; Arizona, in coexisting mafic minerals, 75-2423; Virginia, geochem. reconnaissance, 75-1231; Canada, geochem., 75-2323; Quebec, enrichment of intrusive complex, 75-2327; Surinam, in gabbro, 75-340
 — deposits, colloquium proceedings, 75-908; associated with andesitic rocks, 75-3073; porphyry structural model, 75-1972; porphyry deposits, 75-904; grades of ores, 75-3065; Finland, vein deposit, 75-3098; Sardinia, mineralogical study, 75-968; Turkey, 75-972;
 stratiform, Bronze Age mining activity, 75-2024; USSR, 75-213; mineralization, 75-208; Zaire, 75-976; South Africa, orebodies and country rock, 75-226; India, 1996; morphology and mineralogy, 75-2030; Burma, 75-3107; Korea, regional study, 75-216; China, precious metals in, 75-1998; Australia, hydrothermal deposit, 75-954; South Australia, syngenetic mineralization, 75-3113; in sandstone and dolomite, 75-2036; 2037; USA, disseminated Cu-Mo deposits, 75-913; Arizona, porphyry deposits, biotite as sulphur source, 75-920; California, trace elements in copper belt, 75-325; Missouri, petrol., etc., 75-987; Virginia, abandoned mines, 75-958; Canada, porphyry Mo-Cu mineralization, 75-2326; Alberta, mineralogy and sulphur isotope comp., 75-2000; British Columbia, trace element variations, 75-3340; Puerto Rica, hydrothermal alteration, 75-3097; Peru, porphyry deposit, 75-2046
 —, native, Devon, 75-2397
 —, mineral and compounds, structural chemistry, 75-180, 184; asymmetric anharmonic vibration of Cu in CuCl , 75-897; Cu-Sn-S system, X-ray, 75-2107; Cu_8GeS_4 polymorphs, X-ray, 75-2108; Cu_2SnS_3 - $\text{Cu}_2\text{ZnSnS}_4$, 75-2109; CuBi_2S_8 crystal structure, 75-888; Germany, 75-935; Malagasy Repb., in pegmatitic granodiorite, 75-2025;
 Corals, modern, incorporation of uranium, 75-321; uranium content of reefs, 75-3382; uptake of Mg from seawater, 75-3383
 Corderoite, Nevada, new mineral, opt., X-ray, 75-551
 Cordierite, thermodynamic props., 75-3253; garnet equilibrium, 75-3142 (IV.5); effect of molecular water on lattice geometry, 75-3007; new metastable phase, 75-1055; schist, staurolite in, 75-1632; in metapelites, 75-654; from pelitic hornfels, 75-645; breakdown under high-pressure, hydrous conditions, 75-280; rims on garnet, 75-448; Mg, free energy of formation, 75-279, 3254; Fe-, chloritoid breakdown product, 75-277; Cornwall, in rocks of Land's End aureole, 75-1597; Ireland, in Leinster granite, textural study, 75-459; Spain, cordierite-chromite-niccolite ores, 75-1978; in graphitic hornfels dykes, 75-2684; Switzerland, 75-1617; Czechoslovakia, preferred orientation, 75-2708; India, in granulite, 75-1633; Western Australia, from granulites, 75-1298; N-W Territories, distortion indices, 75-3467; isograd in Archaean meta-sediments, 75-646; Ontario, in gneisses, 75-2723; Brazil, 75-677; Venezuela, in gneisses, 75-675
 Core cutting, vibratory system, 75-2854; electro-osmotic guillotine, 75-2857
 Cork v. Ireland
 Cornubian province, development, 75-3627
 Cornwall v. England
 Cornwall, Missouri v. USA
 Corrensite, Kansas, in Wellington formation, 75-140
 Corrosion processes in boilers, 75-3181
 Corsica v. France
 Corundum, crystal growth, 75-1004; phase relations, 75-1073; thermodynamic props., 75-2096; Gibbs energy, 75-2081; improvement of cabachon colours, 75-1077; coloured by gamma radiation,

- Corundum (*contd.*)
 75-1097; *Yugoslavia*, pink, 75-1079
 Cosalite, crystal structure, anal., 75-1938;
Czechoslovakia, anal., 75-2502; *Japan*,
 chem. anal., 75-530
 Cosmochemistry, symposium, 75-3328
 COSTA RICA, isoprenoids in seep oil,
 75-407; *Arenal volcano*, volume, energy,
 cyclicity of eruptions, 75-3758
 Coulometric detn. of carbon, 75-37
 Covellite, DTA, 75-526; *Germany*, 75-2755;
Switzerland, 75-3104; *Sardinia*, 75-968;
Zaire, 75-975; *Burma*, 75-3107
Cracow, Queensland v. Australia
 Crandallite, *Cape Verde Is.*, in phosphatic
 rock, 75-2517; *Western Australia*, 75-
 3886
 Creaseyite, *Arizona and Mexico*, new
 mineral, anal., opt., X-ray, 75-3595
Crete v. Greece
Crimea, Ukrainian SSR v. USSR
Cripple Creek, Colorado v. USA
 Cristobalite, crystal structure, 75-872;
 thermal conductivity, 75-3856; from
 deep sea chert formations, 75-3522;
 associated with biogenic opal, 75-827;
 effect of atmospheres on formation
 from kaolinite, 75-297; cristobalite-
 tridymite transition, 75-2179; α -, disor-
 dered, structure, 75-158; β -, in system
 $\text{MgO-Al}_2\text{O}_3\text{-SiO}_2$, 75-1055; *Portugal*,
 75-2458; *Ukrainian SSR*, α -, in zoned
 chert concretions, 75-3792; *Spain*, in
 sedimentary facies, 75-3460; *USA*, in
 claystones, 75-638
 Crocidolite *v.* amphibole
 Crust *v.* Earth's crust
 Cryolite, phase relations, 75-3238; sub-
 solidus equilibria, 75-2130
 Cryptomelane, *Korea*, 75-978; *Colorado*, in
 spherulite in obsidian, 75-1683
 Cryptoperthite *v.* feldspar
 Crystal chemistry, ternary structure families,
 book, 75-64; transition-metal dipnictides
 and dichalcogenides, 75-1929; of rhom-
 bic pyroxenes, 75-1893; interstratified
 kaolinite-smectite, 75-85; tantalonio-
 bates, 75-519; complex Nb and Ta
 oxides, 75-882; apatite, 75-3142 (IV.1);
 astrophyllite group minerals, 75-555;
 chlorites, 75-2436; clinohypersthene
 at high temperature, 75-1057; epistil-
 bites, 75-1343; mordenite, 75-3527;
 pentlandite, 75-3555; phenakite
 structure types, 75-3241; pumpellyite
 and juldolite, 75-3464; staurolite, 75-
 3005; Fe in Fe-Ni-S system, 75-886
 — growth, solid-liquid interface, book,
 75-72; sample holding technique, 75-
 3144; with light furnace, 75-1004; in
 space, 75-3143; brucite, 75-3197; cin-
 nabar, 75-3215; hemihydrate, 75-3220,
 3221; phenakite, bromellite, tridymite,
 75-3242; Ca(OH)_2 , 75-3207
 — structure, distortion of coordination
 polyhedra, 75-141; calcium Tschermak's
 pyroxene, 75-148; space groups
 and lattice complexes, 75-858; lattice
 complex concept, 75-857; detn. of
 superstructures, 75-856; close packing
 of spheres, 75-851; octahedral packing
 of 6th and 7th groups, 75-852; layer
 silicates, 75-1902; comparison of
 triclinic cells, 75-2989; cubic structure
 types, 75-2990, 2991; topological
 method for electron-density map,
 definition, 75-2994; structure type
 F51, 75-3023; Dirac's large numbers
 theory, 75-3891; data for oxides,
 sulphides, selenides, tellurides, 75-1809;
 distortion polyhedra in olivines, clino-
 pyroxenes, and amphiboles, 75-865;
 divided structure of andalusite, beryl,
 pyrite, 75-189; aikinite derivatives,
 75-3037, 3038; ancylite, 75-3052;
 apatite $\text{Ca}_5(\text{VO}_4)_3 \cdot \text{OH}$ refinement,
 75-178; strontium 'chlorapatite', Sr_5 -
 $(\text{PO}_4)_3\text{Cl}$, refinement and random error
 analysis, 75-179; aramayoite, 75-171;
 axinite, 75-3009; beryl, Li-bearing, 75-
 861; biringuccite, 75-885; bjarebyite,
 75-181; cerussite refinement, 75-892;
 chernykhite, 75-1903; chevkinitite and
 perrierite, 75-195; titaniferous clino-
 humite, 75-3000; collinsite, 75-1944;
 cosalite, 75-1938; high cristobalite,
 75-872; disordered α -cristobalite, 75-
 158; cubanite, 75-1931, 1932; cupro-
 bismutite, 75-3040; synthetic Sr-
 feldspar, 75-1906, 1907; synthetic
 fleischerite, 75-3043; fluoborite, 75-
 3061; garronite, 75-876; gibbsite, re-
 finement, 75-170; gillespite I & II, 75-
 1914; gladiolite, 75-3038; gratonite,
 75-1937; guérinite, 75-1926; hatchite,
 75-1935; herderite and datolite, 75-896;
 hurlbutite, 75-1946; hydromagnesite,
 75-1940; hydrosodalite, 75-161; H_2O
 and OH in, 75-874; ilvaite, 75-860;
 jahnsite, 75-895; jordanite, 75-887;
 kalicine, 75-1941; kehoite, 75-3030;
 krinovite, 75-1899; krupkaite, 75-3038;
 kurnakovite, 75-1927; labuntsovite,
 75-152; lemoynite, 75-3006; diocta-
 hedral mica 2M_2 , 75-155; barium
 mica refinement, 75-868; synthetic
 Mg^{IV} mica, 75-3012; muscovite, OH
 orientation, 75-867; michenerite, 75-
 3041; olivine containing Co^{2+} , 75-144;
 synthetic cadmium pectolite, 75-149;
 argentine pentlandite, 75-3034; phlogo-
 pite by neutron diffraction, 75-153;
 phosgenite, 75-3051; picropharmacolite,
 75-183; pigeonite, refinement, 75-866;
 pinakiolite, warwickite, wightmanite,
 75-884; plagioclite; pyrope and gros-
 sular, 75-3001; pyrophyllite, 75-293;
 OH orientation, 75-869; realgar, 75-
 1936, 1937; realgar and orpiment re-
 finement, 75-890; orpiment, 75-1936;
 rhodostannite, 75-3217; rhomboclase,
 75-3045; samsonite, 75-1934; sarkinite,
 75-3031; scapolite-wernerite, 75-3019;
 schairerite and sulphohalite, 75-3042;
 slavikite, 75-3044; sodium ammonium
 orthochromate dihydrate & magnesium
 diammonium hydrogen orthophosphate
 tetrahydrate, 75-177; sodium-lithium
 fluoroberyllates, 75-1949; solongoite,
 75-3060; soresite, 75-159; synthetic
 spinels, $\text{Fe}_3\text{O}_4\text{-}\gamma\text{-Fe}_2\text{O}_3$, 75-880;
 stannous tungstate, 75-1921; staurolite,
 75-859; stewartite, 75-1945; mono-
 clinic γ -sulphur, 75-162; suolunite, 75-
 871; szaibelyite, 75-3059; tochilinite,
 75-883; tochilinite II, 75-173; trolleite,
 75-894; ussingite, 75-3017; vashegyite
 and kingite, 75-1852; vermiculite-
 piperidine complex, 75-111; vlasovite,
 75-1888; whitlockite, 75-1943; wod-
 ginite, 75-882; yedinite, 75-1928;
 yttrialite, 75-303; synthetic lithium
 zeolite, 75-877; $\text{Al}_2(\text{WO}_4)_3$, 75-1922;
 CaCO_3 (II), 75-3047; monoclinic
 $\text{CaAl}_2\text{Si}_2\text{O}_8$, 75-873; $\text{Ca}_5(\text{SiO}_4)_2\text{SO}_4$,
 75-1916; CaSO_4 , 75-3219; polymorphs
 of Co_2SiO_4 , 75-145; synthetic CuBi_2S_8 ,
 75-888; synthetic $\text{Cu}_{12-\gamma}\text{Te}_4\text{S}_{13}$, 75-
 888; Fe_2SiO_4 and Ni_2SiO_4 , spinel
 polymorphs, 75-276; $\text{Fe}^{3+}(\text{SO}_4)_3$, 75-
 893; $\beta\text{-GeSe}_2$, 75-3214; KHCO_3 and
 KDCO_3 , 75-1941, 1942; $\text{K}_4(\text{Si}_8\text{O}_{18})$,
 75-1911, 1912; $\text{KFe}(\text{CrO}_4)_2 \cdot \text{H}_2\text{O}$,
 75-1924; $\alpha\text{-MoO}_3 \cdot \text{H}_2\text{O}$, 75-1925;
 $\text{NaCl} \cdot 2\text{H}_2\text{O}$, 75-899; $\text{NaInSi}_2\text{O}_6$, 75-
 1900; $\text{NaH}_2\text{AsO}_4 \cdot \text{H}_2\text{O}$, 75-3032;
 Na_2WO_4 , 75-1923; NiAl_2O_4 (spinel)-
 Ni_2SiO_4 (olivine), 75-1051; PdPS, 75-
 1929; SiC polytype, 75-879; SrFCl and
 BaFCl , 75-1950; $\text{SrGa}_2\text{SiO}_2\text{O}_8$ and
 $\text{BaGa}_2\text{Si}_2\text{O}_8$, 75-3016; ZnSiO_3 and
 $\text{ZnMgSi}_2\text{O}_6$, 75-3010
 Crystallization and fusion, in ternary solid
 solutions, 75-3145
 Crystallography, real space, molybdenite,
 75-891
 Crystals, minerals, and rocks, book, 75-58;
 sectorial structure, 75-2993; stressed,
 thermodynamic equilibrium, 75-2724;
 automatic spark erosion cutter, 75-
 1733
 Csiklovite, *Queensland*, plumbian, chem.,
 75-1366
 Cubanite, transformation, 75-3211; DTA,
 75-526; *Ontario*, structure refinement,
 75-1931, 1932
Cue, WA v. Australia
Culberson Co., Texas v. USA
Culver, WA v. Australia
 Cummingtonite *v.* amphibole
 Cuprite, *SW Africa*, 75-3021; opt., 75-3884;
Australia, 75-952
 Cuprobismutite, synthetic, crystal structure,
 75-3040
Custer Co., S. Dakota v. USA
 Cyanide, deactivation of Cu-activated
 sphalerite, 75-928; analyses using semi-
 automatic titrimeter, 75-766
 Cylindrite, chem., X-ray, 75-1391
 Cymrite, *New Zealand*, in black shale, opt.,
 75-3887
 CYPRUS, sulphide deposits, 75-2023;
Limni concession, geol. history, 75-
 2645; *Troodos massif*, intrusion, extru-
 sion and metamorphism, 75-1521;
 ultrasonic velocities in rocks, 75-1660;
 umbers, basalt-sediment relationships,
 75-3767; ophiolite complex, 75-609;
 metabasic rocks, 75-386; serpentiniza-
 tion, 75-2288
 Cytrolite, *USSR*, 75-212
 CZECHOSLOVAKIA, Precambrian struc-
 tural pattern, 75-2710; *Barrandian basin*,
 spilittized marginal facies of dolerite
 diabases, 75-2603; prehnite and pump-
 pellyite in Upper Proterozoic basalts,
 75-2706; *Bernartice*, eclogites, 75-2745;
Bohemia, garnet gedrites, 75-2707;
 microelements in melilitic rocks, 75-337;
 petrochem. of pluton dykes, 75-591;
Bohemian massif, feeding channels of
 ultrabasic-basic rocks, 75-2602; granitoid
 bodies, 75-2711; S isotopes in sulphides,
 75-3343; pyroxene in spheroidal gabbro,
 75-3473; amphiboles and rock type sub-
 divisions, 75-2548; *Bohemia and Moravia*,
 Gföhl orthogneisses, 75-2709; *Chvaletice*,
 manganese sphalerite, 75-2491; *Bohemian*
Moldanubium, eclogites, 75-1629; *East*
Slovakian flysch, chem. of Magura and
 Dukla unit shales, 75-1178; *Gemerides*,
Gelnica group, palaeogeography, 75-939;
Hranická, franklinite, 75-2475; *Kaňk*,
 $\alpha\text{-AsS}$, 75-2504; *Kozakov*, saponite, 75-
 2940; *Kristanov massif*, platy K-feld-
 spars in durbachitic granitoids, 75-1325;
Krupka, krupkaite, new mineral, 75-
 3599; potash-fluorite intergrowths, 75-
 2683; *Kutná Hora*, canfieldite and Ag-
 rich tetrahedrite, 75-3560; *Macedonia*,

- COSLOVAKIA (*contd.*)
 antonites, 75-2969; *Maglovec*, danburite
 xenoliths in andesite, 75-3461; *Mari-
 nské Lázně*, Co, Ni and Fe arsenides,
 75-2503; *Moldanubicum*, Au in mag-
 netite skarns, 75-2287; gneisses, cordierite
 n, 75-2708; *Moravia*, selenides from
 uranium deposits, 75-3085; marble
 deposits, 75-2705; manganoan tapiolite,
 75-2478; *Ruda*, skarn deposits, 75-2020;
Vizke Tatry Mts., Permian volcanic rocks,
 75-1444; *Ransko*, gabbro-peridotite
 massif, book, 75-787; *Rožná*, Mn and
 Fe-bearing sphalerites, 75-2489; *Saxon*,
granulite Mts., age detn., 75-2813;
Silesia, minerals and literature, 75-1807;
Spissko-gemerské Rudohorie Mts., mag-
 nesite, 75-1371; *Tatra Mts.*, geological
 problems, 75-1414; *Zlaté Hory*, celsian
 in quartzite, 75-3517; cosalite, 75-2502
stochowa v. Poland
- Thiardite v. zeolite
 ites, oxygen fugacity, 75-2082; *Spain*,
 almandine-bearing biotite-cordierite-
 labradorite dacite, 75-660; *Sardinia*, Sr
 isotopes, 75-1158; *Turkey*, 75-972;
Russian SFSR, Cainozoic, detn. of U,
 Th, and K, 75-352; containing garnet,
 75-445; *Mongolia*, age detn., 75-9; *SW*
Africa, porphyry dykes, 75-3669
 HOMEY, volcano-sedimentary rocks,
 75-3639
 urna v. Sweden
 ousie, *Himachal Pradesh v. India*
 burite, comparison with hurlbutite,
 75-1946; *Czechoslovakia*, in xenoliths
 in andesite, 75-3461
 omanite, *China*, new mineral, anal., X-ray,
 opt., 75-2522
 rjur v. Sudan
 mstadt v. Germany
 ita bank, petrographical, 75-1728
 ie Co., *North Carolina v. USA*
 wsonite, detn. in oil shales, 75-753, 2072,
 2868; *Colorado*, diagenetic, in Green
 River formation, 75-501; *Colorado, New*
South Wales, 75-3553
 yingite, *China*, new mineral, anal., X-ray,
 opt., 75-2522
 DT, adsorption to particles in sea-water
 75-1196
 EAD SEA, minerals formed in, 75-2053;
 geochem. sampling of *Kane-Samar*
 spring complex, 75-2312
 ebye temperature, of NaF and RbBr, 75-
 691
 ebye-Waller factors, of NaCl, 75-189; of
 KCl, 75-898; Rb and Cs halides, 75-
 3063; for MgO, 75-166
 eaturville, *Missouri v. USA*
 eccan Traps v. India
 ecrepitation temp. of minerals, dependent
 on gas-liquid inclusions and hardness,
 75-3861
 edolomitization, *Northumberland*, and
 origin of rusty crusts, 75-3783
 eep-Sea Drilling Project, *Pacific Ocean*,
 basalts from leg 6, 75-612
 elafossite, structure type, 75-3023
 elger Han Soman v. *Mongolia*
 ellenite, *Norway*, 75-561
 emanoid v. garnet
 ensity, detn. in rock or mineral samples,
 75-2864; *USSR*, of Permian-Triassic
 rocks, 75-3864
 eolapar v. India
 erbyshire v. England
 ert desert isotope hydrology, *Sinai Desert*,
 75-1200
- Detent spindle stage, 75-2844; computer
 detn. of 2V and indicatrix orientation,
 75-2845
 Deuterium, in early solar system, 75-1258
Devonshire v. England
 Dextran, montmorillonite-dextran com-
 plexes, 75-105
 Diabase v. dolerite
 Diamond, etch patterns on (111) faces, 75-
 164; strength testing, 75-678, 3853;
 genesis, 75-2466; experimental data and
 genesis, 75-509; polishing experiments,
 75-1021; indentation hardness, 75-2735
 methods of synthesis, 75-1005; synthesis
 in magmatic melt, 75-1466; measurement
 of pressure during synthesis, 75-1748;
 synthetic, sectorial structure, 75-2993;
 differences in lattice parameters, 75-
 1917; cubic habit, internal structure,
 75-2464; O and Si detn., 75-1345; in-
 homogeneous, impurity distribution,
 75-2465; in impurities, XRD study, 75-
 3530; black inclusions, 75-1346; reaction
 with heated kimberlite, 75-1006; impurity
 centres, ESR spectra, 75-878; influence
 on luminescence on drill crown efficiency,
 75-758; estimation of grade of deposits,
 75-62; *Russian SFSR*, in igneous rocks,
 75-3665; formation of rich alluvial
 deposits, 75-244; *Ukrainian SSR*, lumi-
 nescence, 75-1075; *Africa*, biotite in-
 clusions in, 75-511; sampling alluvial
 deposits, 75-62; *Africa and Brazil*,
 gaseous inclusions, 75-510; *India*, iden-
 tification, 75-1076; *Western Australia*,
 exploration, 75-3118; *USA, Georgia*,
 75-310
 — abrasives, influences on flat lapping,
 75-23
 —, framesite, plastic deformation, 75-508
 — wire, sawing hard stone, 75-22
 Diatremes, *New South Wales*, garnet clino-
 pyroxenite inclusions from, 75-572
 Dickite, *Poland*, in epigenetic formation,
 75-641
 Differential thermal analysis, in mineralogy,
 book, 75-1810; minerals in system Cu-
 Fe-S, 75-526; minerals of Bi-Sb-S and
 Cu-Sb-As-S systems, 75-532; of ore
 minerals, 75-30; of clay-organic mole-
 cule complexes, 75-1822; endothermic
 effect of kaolinite, 75-86; *Egypt*, iron
 ores, 75-974
 Diffraction, optical, pattern sampling
 method, 75-2852
 Diffusion, helium ions implanted in alu-
 minium, 75-2087; in Cu-containing
 sulphides, 75-1031; in system CaF₂-
 SrF₂, 75-3237; in halide systems, 75-
 3142 (II.7); ions in sea-water in deep-
 sea sediments, 75-391
 —, thermal, pulse method of measurement,
 75-1752; of semi transparent materials,
 75-2725
Dinarides v. Yugoslavia
 Diopside v. pyroxene
 Diorites, *Leicestershire*, age detn., 75-726;
France, surface weathering, 75-2975;
Czechoslovakia, porphyries, 75-591;
USSR, hypersthene-, K/Ar ages, 75-7;
Russian SFSR, Au content, 75-2219;
N. Carolina, zeolites at diorite-granite
 contact, 75-652
 Dolerite, variation and genesis, 75-3682;
 metamorphosed, corona structures,
 75-657; extraction of iron, 75-350, 3179;
Ireland, Tertiary dyke system, 75-3869;
Italy, spilitic, 75-933; *Czechoslovakia*,
 spililitized marginal facies, 75-2603;
Morocco, age detn., 75-2815; *India*,
 palaeomagnetism, 75-1669; dykes,
 petrol., 75-1812, 2570; dyke rich in
 pyroxene, 75-1452; dykes and sulphide
 mineralization, 75-1997; quartz-, con-
 taining micropegmatite texture, 75-1450;
 mega-porphyritytic intrusion, 75-583;
Western Australia, pegrog., chem., and
 geochron. of sills, 75-3706; *Pennsylvania*,
 geol. and origin, 75-2043; *Canadian*
Shield, palaeomagnetism, 75-1667; *New-*
foundland, diabase dykes, 75-2627
 Dolomite, phase relations, 75-2080; crystal-
 lization history, 75-3573; equilibrium
 with calcite, 75-2121; dolomite-calcite
 fractionation, 75-271; EDTA dissolution,
 75-2889; deformed, preferred orientation,
 75-3230; epitaxial growth on mica, 75-
 1048; algal origin of laminations, 75-
 3577; *British Isles*, major and trace ele-
 ment associations, 75-3388; *S. France*,
 75-1543; *Germany*, 75-937; protodolo-
 mite, formation mechanism, 75-1373;
Austria/Italy, petrog. and trace elements,
 75-1374; *Czechoslovakia*, 75-1371;
Poland, 75-940; mineralized, 75-970;
Russian SFSR, 75-643; *Zaire*, 75-943;
Pakistan, geol. and chem., 75-3127;
Queensland, concretions, 75-3380;
California, resources, 75-239; *Colorado*,
 in oil shale, 75-1370; *New York*, syn-
 taxial calcite crystal borders, 75-3572;
Texas, subtidal deposits, 75-2675;
Ontario, C and O isotopes, Mg frac-
 tionation, 75-384
 Dolomites v. Italy
 Dolomitization, *India*, of Bilara limestone,
 75-632; *Texas*, 75-3521
 Dolostone, *South African* continental slope,
 75-2660
 Domains in minerals, 75-854
Donbas, Ukrainian SSR v. USSR
Donegal v. Ireland
Donzurubo v. Japan
Dordrecht v. South Africa
 Drainage, *Greece*, geochem. survey, 75-1227
 Dravite v. tourmaline
 Drilling machine, automatic control, 75-759
Duchesne Co., Utah v. USA
 Duftite, *Germany*, 75-2755
Duke I., Alaska v. USA
Dukwe v. Botswana
 Dunite, *Russian SFSR*, Pt content, 75-1994;
 contacts in ultramafic bodies, 75-642;
Washington, alteration of chromite,
 75-517
Durham v. England
 Dykes, *Cornwall*, elvan, geochem. and
 petrogen., 75-3687; *Germany*, geochem.,
 75-3662; *India*, quartz-dolerite, 75-2570;
 geochem. of post-Dharwar basic dykes,
 75-339; *Western Australia*, clastic, 75-
 3646; *Montana*, mafic, cylindrical joint-
 ing, 75-3709; *Quebec*, clastic, Pleistocene,
 75-1583; *Greenland*, alkali loss and
 retention, 75-2243
 Dyscrasite, *New Brunswick*, 75-2041
- Eagle Mts., *Texas v. USA*
 EARTH, accretion, 75-2361; primitive,
 working model, 75-2197; energy
 resources, book, 75-73; density, book,
 75-1800; introduction to geology, books,
 75-2911; meteoroid impacts, 75-1252;
 primordial rare gases, 75-1157; argon
 degassing model, 75-1122, 1123; abun-
 dance of siderophile elements, 75-312;
 palaeoclimatology, 75-3918; encounters
 with comets, 75-2370; comparison with
 Mars, 75-2199; *India*, expanding, palaeo-
 magnetic observations, 75-692

- Earth's core, sulphur content, 75-1028
— crust, resources, 75-3064; storage of CO₂, 75-2180; *Russian SFSR*, thickness, 75-1501; *India*, Precambrian crustal evolution, 75-339; Archaean volcanism, 75-597; stress distribution beneath *China*, 75-1425; oceanic, *Macquarie I.*, magnetic props., 75-1662; *Kansas*, upper mantle stratigraphy, 75-2629; *Greenland*, early crustal thickening in Archaean, 75-1601
- Earthquakes, prediction, 75-3879; rotation of Earth, 75-1690; phase changes in mantle, generation, 75-1008; *California*, electrical resistivity variations, 75-1657; *Central America*, 1961-1972; 75-3751
- Eastern Ghats v. India*
- Eastern Riverina, NSW v. Australia*
- Ebro R. v. Spain*
- Echo Bay, NWT v. Canada*
- Eclogites, elastic props. and chemistry, 75-2745; role of magnetite and actinolite in assemblages, 75-1007; Fe-Mg partitioning in garnets and clinopyroxenes, 75-2136; metamorphic succession, 75-3833; *France*, and ancient oceanic crust, 75-3765; in lens in granites and gneisses, 75-1604; *Italy*, of Alpine age, 75-1608; superferic, of Voltri group, 75-2701; *Germany*, 75-1625; *Austria*, metamorphism, 75-1612; *Norway*, from ultramafic mass, 75-2695; *Czechoslovakia*, chem., 75-1629; *USSR, California, Japan*, 75-1301; *India*, 75-665; *New South Wales*, from serpentinite, 75-2625; *Hawaii*, chem. and petrog., 75-1477
- Ecology, *United Kingdom*, mineral exploitation and waste area rehabilitation, 75-197
- ECUADOR, *Cotopaxi volcano*, alteration of andesitic lavas, 75-3760
- Edenite v. amphibole
- EGYPT, K/Ar ages of basaltic rocks, 75-1711; phosphate rock, extraction of phosphoric acid, 75-240; *Bahariya*, iron ore deposits, 75-974; *Eastern Desert*, ages of nepheline syenite ring complexes, 75-1712; biotites in granitic rocks, 75-1315; geochem. sampling techniques, 75-2338; *Umm Naggat*, biotites in granitic rocks, 75-1314; *Fawakhir gold mine*, Au dispersion haloes, 75-2337; *Gebel Katrany*, U-bearing ore, 75-1959; *Nile Delta* sediments, inclusions in quartz, 75-2455
- Eilat-stone, *Israel*, 75-1102
- Ekanite, opt., 75-1098; gem discovery, 75-311; related to umbozerite, 75-1398
- Elagandal v. India*
- Elasticity, of beryl, 75-683; strain effects in cryptoperthites, 75-2446; of germanates, 75-1012; of hydrosodalite, 75-2733; α -quartz, 75-3854
- Elba v. Italy*
- Electrolytes, high temp. e.m.f. measurements, 75-1798
- Electron diffraction, high energy, nature of Kikuchi lines, 75-2995; low energy, from cleavage face of MgO, 75-165; high voltage of dioctahedral mica, 75-155; SAD patterns of micas, 75-77; superlattice lines in ferrite, 75-3026, 3027, 3028; structure data for sepiolite 75-1905; of protein crystals, 75-1884
- Electron imaging, pyrrhotite superstructures, 75-1930
- Electron microscopy, support grids for colloid particles, 75-76; of native gold, 75-1347; quartz grain surface textures, 75-2454; Brazil twins in amethysts, 75-3298; enstatite exsolution lamellae, 75-2413; exsolution textures in Fe-rich clinopyroxene, 75-461; clay mineral layer structures, 75-1838; interstratified clay minerals, 75-79; peridotite xenoliths in kimberlites, 75-679; of andosols, 75-2970; structure of metamorphosed kerogen, 75-369
—, high voltage, *Austria*, of deformed sodic plagioclase, 75-1326
—, scanning, in mineral grain study, 75-2846; particle mounting with polyvinyl acetate-methyl alcohol, 75-2847; authigenic pyrite, 75-1579; diagenesis of quartz in sandstones, 75-2654; pyroxene exsolution lamellae, 75-1730; weathering of phlogopite, 75-3497; granitic rocks, 75-3171; *Russian SFSR*, Devonian reservoir rocks, 75-2974
- Electron-optical studies, α -transformation in troilite, 75-1037; montmorillonites, 75-80
- Electron paramagnetic resonance, impurity centres in diamond, 75-878; Mn²⁺ in apatite, 75-3055; resonance of silicates and clays, 75-1881
- Electron probe microanalysis, book, 75-2912; data processing methods, 75-2894; standard selection, 75-3142 (II.8); role of carbon film thickness, 75-778; quantitative mineralogy, 75-915, 916; energy dispersive detectors, 75-775, 779; energy dispersive, preparing silicate rock glasses, 75-1734; oxygen K absorption spectra, 75-2986; analysis of sulphide minerals, 75-54, 55, 531, 533; reduction of ilmenite, 75-1025; end members, Fe²⁺, Fe³⁺ in pyroxenes, 75-2412; synthetic pyroxenes, 75-2148; of saussurites, 75-655; mesosiderites, 75-3440; Mg and Fe in carbonate cements and rocks, 75-2261; manganese nodules, 75-1572; non-volatiles in fluid inclusions, 75-1786; *Italy*, sphalerite, 75-1361; *India*, trace elements in sulphides, 75-319; *New Brunswick*, zoned plagioclase, 75-1329
- Electron spin resonance, trace impurity distribution in minerals, 75-1792; Fe³⁺ in α -quartz, 75-1908; spectra from manganese nodules, 75-373; of lignite and ball clay, 75-804
- Electrophoresis, separation of clay minerals, 75-2921
- Electrum, *New Zealand*, 75-2038
- Elements, polymorphic types, 75-1877
- Ellesmere I., NWT v. Canada*
- Emerald, distinction from green beryl, 75-1080; *Tanzania*, 75-1082; *Zambia*, in biotite schist, opt., 75-1081; *South Africa*, growth features, 75-305; *North Carolina*, 75-3310; *Brazil*, opt., 75-3309; new deposits, 75-2184
- Emissivity, thermal, of semi-transparent minerals, 75-2725
- Emplectite, *Greece*, 75-2022
- ENGLAND, mineral collecting, 75-701; Jurassic reef and subreef rocks, trace elements, 75-2264; burial depth of Lower Oxford clay and soil properties, 75-1844; interstratified illite-smectite in weathered Oxford Clay, 75-829; various localities, boreholes, 75-1401; waste disposal and ground water pollution, 75-2316; *SW*, classification of carboniferous rocks, 75-1408; granites, magmatism and tin mineralization, 75-199; Lizard-Dodman-Start thrust, 75-3626; greenstone belt, bibliog. of rock analyses, 75-3396; folds at southern margin of Culm synclinalorium, 75-2544; Zn & Cu in granites, 75-3353; granites, radiogeologic study, 75-2233; ball clay deposits, 75-2949; *SE*, strength, compressibility and density of chalk, 75-1656; *N*, palaeomagnetism from Carboniferous system, 75-3892; *NW*, base metal resources, 75-1226; *NE*, geochem. of brines from Coal Measures, 75-3401; palaeogeography of British Zechstein, 75-2056; *Bodmin Moor/Dartmoor*, age of Upper Palaeozoic volcanics, 75-2806; *Bristol channel*, seismic refraction surveys, 75-1407; *London basin*, London Clay, engineering geological study, 75-1847; *Cheviot area*, stream waters and sediments, geochem., 75-3373; *Stratford-upon-Avon/Evesham area*, geol., 75-2656; *Pennines*, S and O isotopes and ore genesis, 75-2210; *Cross Fell inlier*, age detn., 75-1701; *Cross Fell*, geol. of area, 75-2540
—, *AVON, Yate*, celestite deposits, 75-33; —, *BUCKINGHAMSHIRE, Milton Keynes* geol. of area, 75-2657
—, *CORNWALL*, stream-sediment geochem., 75-2333; concealed granite roof, 75-2545; tin in sediments, 75-2880; granite porphyries, 75-3688; *W*, geological guide, 75-562; *Botallack*, 'tin-floor', 75-3099; discordant calc-silicate bodies, 75-3815; *Land's End* aureole, origin of cordierite-anthophyllite rocks, 75-1597; *U* in granite and greenstones, 75-3352; *Millook Haven*, deformed greywacke, geochem. of quartz veins, 75-388; *Pendarves mine*, lode/elvan relationships, 75-3100; *Perranporth*, geochem. of Devonian sediments, 75-3392; elvan dykes, 75-3687; *St. Austell*, Fe-impurities in kaolinite, 75-1816; *South Crofty tin mine*, sampling distribution, 75-62; *Trelavour and Tregarden*, biotites, 75-2153; *Wheal Jane*, mineralization, controls, 75-2017
—, *CUMBRIA, Caldbeck Fells*, mineral collecting, 75-701; *Coniston*, metallogenesis in southern Caledonides, 75-1982; *Hilton*, fluorite, 75-701; *Lake District*, ages of mineral localities, 75-1702; monocarboxylic acids in lake sediments, 75-2281; *Lake Windermere*, sediments, stable magnetic remanence, 75-2749
—, *DERBYSHIRE*, fluorspar mining potential, 75-2048; *Matlock, Masson Hill*, mineralogy and paragenesis of fluorspar flat, 75-545; *Oxclose mine*, bravoite, 75-545
—, *DEVON*, stream-sediment geochem., 75-2333; lignite and ball clay, ESR studies, 75-804; *Budleigh Salterton*, native Cu, 75-2397; *Teign Valley*, stream sediments, major and trace element anomalies, 75-2334
—, *DORSET*, spontaneous combustion of oil-shale, 75-1693
—, *DURHAM*, Permian sands offshore, 75-3784; *Ferryhill*, baryte mineralization in Lr. Magnesian Limestone, 75-235; *Weardale*, fluorite, 75-701
—, *HAMPSHIRE, Hampshire basin*, London Clay, engineering geological study, 75-1847; *Liss*, infiltration study on Lr. Greensand outcrop, 75-410
—, *LEICESTERSHIRE*, igneous rocks, Rb/Sr ages, Sr isotope ratios, 75-726
—, *NORFOLK*, records of wells, 75-2543
—, *NORTH YORKSHIRE*, granite beneath Pennines, 75-3686

AND (contd.)

- NORTHUMBERLAND, origin of
 Northumberland basin, 75-2541; de-
 lamination and rusty crusts, 75-
 2583; Permian sands offshore, 75-3784;
 Penmouth, geol. of district, 75-2542;
 Westoe colliery, spinel inclusions in
 gabbroic dolerite dyke, 75-2397
 NOTTINGHAMSHIRE, East Retford,
 Orkney, Gainsborough, geol. of area,
 75-1406
 NORFOLK, Exmoor, mineral deposits,
 75-3080
 NORWAY, DTA, 75-532; Taiwan, Sb contents,
 75-2499
 Nuclear dispersive X-ray spectrometry, quan-
 titative analysis, 75-775; 779
 Nuclear resources, national policy, 75-902
 Olivine v. pyroxene
 Olivine, lower-grade stability limit, 75-
 2566; grain surface etching, 75-3458; IR
 spectra, 75-1892; in saussurites, 75-655;
 Norway, in granogabbro, 75-1602; Japan,
 75-1635; zoned, microprobe study, 75-
 2567; New South Wales, in ophiolites,
 75-3463; North America, 75-1642; USA
 Georgia, in sediments, 75-2672; Florida,
 micro-textures with SEM, 75-2671;
 Oregon Sea, on continental shelf, 75-
 2602; Brazil, 75-677
 Olivines, Iceland, geol., 75-1456
 Olivine, Dead Sea, 75-2053
 Olivine, SW Africa, chem. anal., opt.,
 X-ray, 75-309
 Olivine, definition, 75-1532
 Olivine v. zeolite
 Olivine, Germany, 75-2755
 Olivine, Czechoslovakia, from U
 deposits, 75-3085
 Olivine v. Turkey
 OPIA, Afar rift, basalt-pantellerite
 sequence, 75-3730; Assab Range,
 Volcanology & petrol., 75-3729; alkali
 basaltic suite, geochem. trends, 75-1165
 Olivine, stability on heating, 75-3223,
 75-224
 Ophiolite I. v. Greece
 Ophiolite, Brazil, with high birefringence,
 75-1108
 Olivine, α -, crystal chem., 75-3241; β -
 thermal expansion, 75-2739
 Olivine, sectorial structure, 75-2993;
 Geothermometer, 75-2330; Russian
 SFSR, with khibinskite, 75-556
 OROPE, rupture of North American-
 Western European palaeoblock, 75-
 2774; tin mineralization, 75-1957; E,
 Upper Permian Zechstein, 75-2057; NW
 continental shelf, geol., book, 75-2910;
 Carpathian Mts., fractionation in
 Mesozoic carbonates, 75-3393; Meuse-
 basin, heavy alluvial minerals, 75-1542
 Olivine, oxygen fugacity & oxidation
 state, 75-2082; in silicate glasses, oxida-
 tion states, 75-1068, 1069; in plagioclase-
 liquid and clinopyroxene-liquid
 equilibria, 75-1159; in Precambrian
 sedimentary rocks, 75-382
 Olivine structures, 75-2077
 Olivine, gamma-ray spectra, 75-3549
 Olivine, trace content of atmospheric
 gases, 75-1181; replaced by celestine,
 75-3569; plant spore assemblages, 75-
 2058; on surface of Io (Jupiter), 75-
 2779; England, palaeogeography of
 British Zechstein, 75-2056; E. Europe,
 Upper Permian Zechstein, 75-2057;
 Russian SFSR, Lower Permian, Mn in,
 75-2026; K salts in, 75-2066; Red Sea,
 geochem. and petrog., 75-1566; Michi-
 gan basin, significance of laminations,
 75-2061; Utah, fold relationships, 75-
 3778; Nova Scotia, genesis, 75-2064;
 distribution and diapiric nature, 75-
 3139
 — basins, water depth, 75-2054; Canada
 structural v. sedimentary interpretation,
 75-2055
 Exmoor, Somerset v. England
 Exsolution boundaries in feldspars, orienta-
 tion, 75-157
 Famatinite, DTA, 75-532; Taiwan, Sb con-
 tent, 75-2499; Greenland, 75-2497
 Farringtonite, in mesosiderites, 75-3440
 Farsund v. Norway
 Fats, in soils, 75-2907(6)
 Faujasite v. zeolite
 Fayalite v. olivine
 Feldspars, chem. and textural props., book,
 75-68; orientation of exsolution bound-
 aries, 75-157; paramagnetic centres in,
 75-490; authigenic, alkali metals, geo-
 chem., 75-380; orientation of strain
 ellipsoids, 75-682; Rb solubility, 75-3142
 (L.4); Sr-bearing, structure refinement,
 75-1906, 1907; mixed crystals, 75-3142
 (V.1); peristerite gap, 75-3142 (V.6);
 infiltration metasomatism, 75-2086,
 3152, 3153; weathering, behaviour of
 Be in pegmatites, 75-2228; from car-
 bonate rocks, O isotopes, 75-2231; in
 system $KAlSiO_4$ - $BaAl_2Si_2O_8$ - SiO_2 - H_2O ,
 75-2167; synth. $SrGa_2Si_2O_8$ and $BaGa_2$ -
 Si_2O_8 , crystal structures, 75-3016; Scot-
 land, chem. and economic aspects, 75-
 1980; poikilo-macrospherulitic, in
 peridotite, 75-1468; Aberdeenshire, in
 weathered gabbro, 75-828; France, in
 granophyres, 75-3514; Switzerland, peg-
 matitic, trace elements, 75-2211; Mala-
 gasy Repb., in pegmatitic granodiorite,
 75-2025; India, from charnockite series,
 75-488; North Carolina, in orbicular
 rocks, 75-604; Labrador, 75-3515
 —, adularia, Nevada, O isotope ratios, 75-
 2208
 —, albite, bonding effects, 75-3018; syn-
 thesis, Si/Al ordering, 75-3142 (V.7);
 melting in multispecies fluid, 75-249;
 role in eclogitic assemblages, 75-1007;
 in synthesis of nitrate scapolite, 75-300;
 Portugal, granite, 75-1598; North
 America, 75-1642; Colorado and Wyo-
 mining, authigenic, 75-3510; New Hamp-
 shire, 75-2762; Virginia, analbite-
 monalbite transition, 75-3284
 —, alkali, X-ray, chem. data, 75-491;
 liquid equilibrium relationships, 75-
 2164; exsolution microstructure, 75-
 2165; solvus, 75-3142 (V.3); Al/Si
 order and symmetry, 75-3142 (N.4);
 low temp. unit cell parameters, 75-2166;
 Ireland, in pegmatites, 75-1440; Norway,
 stress and strain in cryptocrystalline
 lamellae, 75-2731; Japan, pegmatitic,
 Pb isotopes, 75-318; from plutonic
 rocks, chem., 75-492
 —, alkaline-earth, structural and chem.
 correlations, 75-3142 (V.5)
 —, amazonite, colour centres, 75-490;
 in granitic rocks, 75-489; New Hamp-
 shire, 75-2762
 —, andesine, Malagasy Rep., moonstones,
 opt., 75-1106
 —, anorthite, crystallization behaviour,
 75-2170; phase relations, 75-1073;
 determination by zone method, 75-3512;
 NMR study of phase transition, 75-3287;
 electric field gradients, 75-3288; Al-
 excessive, 75-2171; in join åkermanite-
 anorthite-forsterite, 75-2145; comparison
 with hurlbutite, 75-1946; Alps, in
 epidote-bearing metamorphic rocks, 75-
 2699
 —, antiperthite, Sweden, in metavolcanic
 rock, 75-2447
 —, barium, Norway, in Ordovician sedi-
 ments, 75-3516
 —, buddingtonite, Idaho, in Phosphoria
 formation, 75-2451
 —, bytownite, Rockall, 75-2538; South
 Africa, calcic, in layered intrusion,
 75-3705
 —, cryptoperthite, elastic strain effects,
 75-2446
 —, labradorite, spectral reflectance, 75-
 684; New York, gem, 75-2195; Labra-
 dor, exsolution lamellae, 75-1328;
 Mexico, tubular voids in phenocrysts,
 75-495
 —, microcline, synthesis, Al/Si ordering,
 75-3142; Czechoslovakia, intergrowth
 with fluorite, anal., 75-2683; Russian
 SFSR, in veins in fenites, anal., opt.,
 X-ray, 75-464; Malagasy Repb., grano-
 diorite, 75-1445
 —, oligoclase, Kenya, colourless, opt., 75-
 1327; satellites on X-ray patterns, 75-
 3513; Malagasy Repb., in granodiorite,
 75-1445
 —, orthoclase, Fe, Mössbauer spectrum,
 75-870; Czechoslovakia, intergrowth
 with fluorite, anal., 75-2683; Russian
 SFSR, in veins in fenites, anal., opt.,
 X-ray, 75-464
 —, perthite, origin of phase distribution,
 75-2444
 —, plagioclase, exsolution, 75-1882; cation
 exchange equilibria, 75-2168; optical
 data, 75-2449; thermoluminescence,
 75-2732; structural and chemical cor-
 relations, 75-3142 (V.5); hydrothermal
 fluid reactions, 75-3285; determination
 by zone method, 75-3512; Eu distri-
 bution with silicate liquid, 75-2082;
 Eu and Sr distribution in plagioclase-
 liquid equilibria, 75-1159; in saussurites,
 75-655; reaction with olivine in meta-
 morphosed dolerite, 75-657; Na-rich,
 Schiller effects and exsolution, 75-493;
 lunar, 75-1254; crystallization in lunar
 basalts, 75-2169; lunar & terrestrial,
 phase transformations and exsolution,
 75-2344; Cornwall, in rocks of Land's
 End aureole, 75-1597; Perthshire, pheno-
 crystals in sandstone, 75-3684; Ireland,
 75-459; France, orientation in quartzif-
 erous dolerite; 75-755; Germany, 75-
 1628; Mediterranean, in ophiolites, 75-
 609; Elba, synneusis with K-feldspar,
 75-1337; from layered extrusion, 75-
 338; Austria, sodic, deformed, 75-1326;
 Alps, in epidote-bearing metamorphic
 rocks, 75-2699; in margarite-bearing
 rocks, 75-3511; Sweden, Ca/Na distri-
 bution with scapolite, 75-2450; Poland,
 from gabbros, 75-341; Siberia, authigenic,
 from productive deposits, 75-627; India,
 conversion to perthite + nepheline, 75-
 647; from anorthosite-metanolite com-
 plex, 75-2448; used to determine lava
 flow direction, 75-2621; Japan, in
 granites, opt., 75-496; Malaysia, in pyro-
 xenites, 75-2715; New South Wales, in
 clinopyroxenite, 75-572; New York,
 75-3312; Oregon, transparent, opt.,
 75-1107; Wyoming, in metadolerite
 dykes, 75-494; New Brunswick, zoned,

- Feldspars (*contd.*)
 crystallization history, 75-1329; *Greenland*, in anorthositic, 75-418; trace elements, 75-1161; *Brazil*, 75-677
 —, potassium, Al/Si order, X-ray, 75-1323; phase relations, 75-2080; barium ions in structure, 75-3015; as aid to precipitation of kaolinite, 75-2937; *Italy*, X-ray detn. of Ab content, 75-2445; *Elba*, synneusis with plagioclase, 75-1337; *Czechoslovakia*, platy, from durbachitic granitoids, 75-1325; *USSR*, triclinicity, 75-1322; *Russian SFSR*, in phenocrysts of porphyritic rocks, 75-1324; *India*, 75-1473; *Colorado* and *Wyoming*, authigenic, 75-3510; *Virginia* and *Ohio*, voids in, and porosity, 75-3809
 —, sanidine, thermoluminescence, 75-2732; *France*, Nevada twin, 75-1321; *USA*, phenocrysts from rhyolitic sequences, O isotope anal., 75-402
Felgueiras v. Portugal
 Felsite, *South Africa*, petrochem., 75-3701
 Fengluanite, *China*, new mineral, anal., X-ray, opt., 75-2522
 Fenites, *Russian SFSR*, minerals in veins, 75-464
 Ferberite, origin, thermodynamic data, 75-251
Fergana, Uzbek SSR v. USSR
 Fergusonite, structure relationships, 75-882; *USSR*, 75-212
 Ferrichromite, *Washington*, anal., 75-517
 Ferrierite v. zeolite
 Ferrihydrite, *Ontario*, 75-3889
 Ferrite, magnesium, electron diffraction superlattice lines, 75-3026, 3027, 3028
 Ferrihorite, *USSR*, 75-212
 Ferromagnesian minerals, *Austria*, in granulites, 75-3834
 Ferromagnetic resonance, spectra of lunar fines, 75-1248
 Ferromanganese nodules, rare-earth elements in, 75-1144
 Ferromanganese deposits, *South Pacific*, elemental accumulation rates, 75-1167
 Ferroniobium and ferrotitanium ore, photometric detn. of P, 75-1779
 Ferropseudobrookite v. pseudobrookite
 Ferrotungsten ore, detn. of Sn and As in, 75-1774
Ferryhill, Durham v. England
 Fibrolite, *Ireland*, 75-459
Fife v. Scotland
Fiji v. Pacific Ocean
 FINLAND, Fenno-Scandinavian uplift, 75-2773; metallogenic features, 75-3079; coexisting magnetite and ilmenite, 75-3539; nickelhexahydrite, 75-3571; Se in sediments, 75-3364; meteorite impact melt rocks, 75-3449; *Finnish Northern Karelia*, haapalaite, new mineral, 75-3597; *Igaliko*, nepheline syenite complex, 75-3654; *Kaatiala* pegmatite, transparent beryls, 75-3466; *Kivimaa*, Cu-Au vein deposit, 75-3098; *Korsnäs*, apatite, monazite and allanite, 75-3584; *Outokumpu*, S isotopes in ores, 75-3342; pentlandite, 75-3555; *Pargas*, pargasite, 75-3483; *Pelling*, Precambrian bedrock, 75-3618; *Puolanka*, geol. of area, 75-3821; magnesioriebeckite and penninite, 75-3488; *Sääkslahti*, orbiculite boulders, 75-3617; *Sääksjärvi* area, shock metamorphism, 75-3822; *Silinjärvi* carbonate complex, richterite and amphibole, 75-3489; tetraferriphlogopite, 75-3495; *Sokli*, carbonatite, age, 75-2805
 Fire-assay procedure, efficiency using NiS collector, 75-2876
Fiskensæset v. Greenland
 Fission tracks, studies in geology, 75-1790; dating tanzanite, 75-5; micas and vermiculites, 75-3507; annealing in volcanic glass, 75-2092; *Sweden*, hornblende, biotite, and phlogopite, 75-2803; *Mid-Atlantic Valley*, dating basalts, 75-2832
Israel, apatite, 75-1715; *India*, age of granites, 75-12; *Maine*, granitic plutons, comparison with other dating methods, 75-2842
 Flame photometry, detn. of Na and K in water, 75-397
 Fleischerite, synthetic, crystal structure, 75-3043
Florida v. USA
 Flotation, particle-bubble attachment, 75-1961; mixing patterns in cells, 75-1743; semibatch, rate constants, 75-1742; *South Africa*, various ores, 75-3123, 3124
 Fluid-bearing reactions, 75-1018; template transformation, 75-246; system $\text{CaO-MgO-Al}_2\text{O}_3\text{-SiO}_2\text{-CO}_2\text{-H}_2\text{O}$, 75-247
 Fluid inclusions, in diamonds, 75-510; in chromite, 75-3543; in glass, from meteorite impact crater, 75-435; microprobe anal. of non-volatiles, 75-1786; cinematographic study technique, 75-756
France, in quartz, 75-1334; *Alps*, in quartz, 75-1330; *Sardinia*, in fluorite, 75-999; *Norway*, in amphibolite facies rocks, 75-561; *Russian SFSR*, in halite crystals, 75-546; *China*, in quartz, 75-2032; *Korea*, in quartz, 75-979; *Colorado*, in fluorspar and gold deposits, 75-3070; *Canada*, in U-Ni-Ag-Cu deposits, 75-1148
 Fluids, alteration of minerals, 75-3154; migration through crystalline rocks, 75-1465; channels in salt, 75-393; $\text{N}_2\text{-CO}_2\text{-H}_2\text{O}$ fluids for hydrothermal experiments, 75-248, 249; in equilibrium with peridotitic mineral assemblages, 75-257; nepheline-villiaumite-lithium fluoride liquid phases at high temps., 75-252
 Fluoborite, crystal structure refinement, 75-3061
 Fluorescence thin sections, prep., 75-1735
 Fluorides, interdiffusion in system $\text{CaF}_2\text{-SrF}_2$, 75-3237; depolymerizer in spectrophotometric detn. of silica, 75-31
 Fluorine, in volcanic gases, 75-2753; in water, 75-2293; ionic vibration in NaF, 75-187, 1948; XRF detn. in ceramics and raw materials, 75-1784; detn. in silicates with ion microprobe, 75-1759; *Russian SFSR*, in geol. formations, 75-314
 Fluorite, world consumption, 75-997; X-ray topography, 75-2518; absorption spectra, 75-1385; preferred analytical values, 75-762; analysis of CaF_2 in, 75-761; rare-earth, dissociation texture, 75-3239; lanthanide element content, 75-2214; F in associated water, 75-2293; *Cumbria* and *Durham*, 75-701; *Sutherland*, 75-930; *France*, age detn., 75-727; *Belgium*, cause of colouration, 75-1384; *Spain*, trace elements, 75-1383; *Sardinia*, fluid inclusions, 75-999; *Poland*, mineralization and tectonics, 75-1989; *Czechoslovakia*, intergrowth with potash feldspar, 75-2683; *USSR*, associated with Cu ores, 75-208; *Russian SFSR*, in nepheline syenite, 75-460; *New South Wales*, fluid inclusions, 75-1786; *Colorado*, fluid inclusions, 75-3070; *New Hampshire*, 75-2762; *Texas*, occurrences, etc., 75-2050
 — deposits, 75-904; history of mining, 75-2049; role of vadose waters in formation, 75-3120; *Derbyshire*, min. and paragenesis, 75-545; mining potential, 75-2048; *Spain*, in limestones, 75-198
Germany, 75-937; from pegmatites, 75-998; *Russian SFSR*, epithermal deposits, age 75-2823; *South Africa*, low grade brecciated ore, 75-3121, 31 flotation tests, 75-3123, 3124; *Korea*, geothermometric studies, 75-238; *Western Australia*, 75-3125; *Ontario*, geochem. prospecting methods, 75-2324
 Folded rocks, *India*, interpretation by lineation, 75-568
Forno v. Italy
 Forsterite v. olivine
 Fossil vegetation, *France*, in bauxite, 75-3336
 Fossil wood, carbonisation temp. from pyroclastic rocks, 75-2632
 Fossils, phosphatic, mineralogy and trace elements, 75-378
 Fossilization, leaching of Na from skeletal parts, 75-1134
 Fourier analysis of geochem. data, sedimentary cycles, 75-1166
 Fracture traces, analysis by optical method, 75-2851
 Fracture zones, *China*, 75-1634
 F-radiography, U in basalt, ignimbrite and syenite, 75-353
 Framesite v. diamond
 FRANCE, geology, books, 75-1802; evolution of Permian, 75-2810; zircon populations in igneous & metamorphic rocks, 75-1287; *Alsace*, micropharmacolite, 75-183; *Aquitaine*, quartz-feldspar sandstone from Trias, 75-614; *Aquitaine Basin*, molassic silting, 75-614; occurrence of hydrocarbons and hydrogen sulphide, 75-370; *Causse*, acid xenolith in basanite flow, 75-2596; *Central Pyrenees*, *Barousse massif*, migmatite types, 75-1607; *Belledonne* and *Pelvoux* massifs, metamorphic model from schists, 75-1622; *Chaine de Belledonne*, *Allemont*, retrograde metamorphism, 75-1605; *Cévennes*, *Beaume Valley*, white micas, 75-1317; *French Alps*, meteorite impact crater, 75-1281; *Golfe du Lion*, clay minerals in sediments, 75-832; carbon isotopes in sediments, 75-2258; *Jalleyrac*, basalt, 75-2089; *Languedoc*, continental carbonate deposits, 75-1543; *Lorraine*, *Hussigny*, iron oolites, 75-1963; *Maritime Alps*, dish structures and sand flow, 75-614; *Massif Central*, pyroclastic rocks, 75-3660; two-mica granites, 75-3691; chem. of ultramafic xenoliths, 75-3690; surface weathering of rocks, 75-2975; catazonal xenoliths in Neogene volcanic, 75-659; eclogite, basic, ultrabasic association, 75-1604; pyroclastic breccias, emplacement temp., 75-2632; *Aigoual*, feldspars in granophyres, 75-3514; *Haut Limousin* metamorphic structure, 75-3829; *Limouzat*, primary U-mineralization, 75-3102; *Mont Blanc* and *Aiguilles Rouges* massifs, amphibolite metamorphism, 75-1615; *Mt. Bourbonnaise*, U and Th minerals in granites, 75-3346; *Morvan Mts.*, *Gien-sur-Cure* granite, 75-589; *Normandy*, glauconites, 75-2435; *Paris Basin*, attapulgites, 75-2954; Cr and V in sediments, 75-3376; magnetic anomaly, 75-3877; U transport in granites, 75-3689; *Pay St.*

- CE (contd.)
 polyte, tephrite, 75-2089; *Provence*,
 Durance, pseudobauxite, 75-831;
 ône delta, sedimentation, 75-614;
 ges Mts., lath-shaped illites from
 dstone, 75-803; ARDECHE, *Coiron*,
 of basaltic eruptions, 75-2809;
 IÈGE, Lherz, lherzolites, 75-3692;
 eille, fossil vegetation, 75-3336;
 érigut massif, quartziferous dolerite,
 entation of biotite and plagioclase,
 -755; AVEYRON, *St-Geniez-d'Olt*,
 ascovite from biotite-staurolite-garnet
 sist, 75-1316; BOUCHES-DU-RHÔNE,
 rance R., mineralogy of bauxite beds,
 -2960; CORRÈZE, *Rochechouart*,
 apatites, 75-3452; *Ussel*, inclusions
 gangue of quartziferous vein, 75-
 442; CÔTES-DU-NORD, *Bay of St-*
leuc, age of gneissic diorite, 75-2811;
 NISTÈRE, *Baie d'Audierne*, crystal-
 le schists, 75-3628; metamorphic
 dimentary assemblage, 75-3828;
 RONDE, *Gironde estuary*, sedimenta-
 tion, 75-614; HAUTES-ALPES, *Jas Roux*,
 uthierite, laffittite, new minerals, 75-
 95; *Orpierre*, inclusions in quartz,
 1334; HAUTE-GARONNE, *Barousse*
 massif, muscovite-granite sills, 75-590;
 HAUTE-LOIRE, *Chavaniac*, dating
 orite veins, 75-727; *Devès* volcanic
 rcks, 75-3717; HAUTES-PYRÉNÉES,
 massifs de *Cauterets*, granites and
 elusions, 75-3659; concentric structure,
 -3661; HÉRAULT, dating of Palaeozoic
 adiments, 75-2; *Montagne Noire*, Her-
 nian folding, 75-1409; scheelite, 75-
 83; LOIRE ATLANTIQUE, *Baie de*
urgneuf, petrog., 75-3629; LOZÈRE,
Agoual, clay fraction study on
 iils, 75-2976; MANCHE, *Mt. St.*
ichel, littoral benthic sedimentary
 ructures, 75-1541; MORBIHAN,
Questembert, tin in two-mica granite,
 5-3351; ORNE, *Ferrière-aux-Etangs*,
 olitic iron stones, 75-3103; PAS-DE-
 LAIS, framboidal pyrite, 75-3558;
 UY-DE-DÔME, *Mont Dore*, sinidine,
 evada twin, 75-1321; SAÔNE-ET-
 OIRE, *Charollais*, *Bourgogne*, Eocene
 lcanic activity, 75-1704; *La Petite*
errière, dating fluorite veins, 75-727;
 AVOIE *Vanoise massif*, pre-Alpine
 metamorphism, 75-3830; SOMME,
laine de Picard, sedimentation, 75-
 14; VENDÉE, eclogites and ancient
 ceanic crust, 75-3765; gangue quartz
 f antimony veins, 75-925; *Mortagne*
 ranite, U mineralization, 75-323;
 VAR, age of Triassic rocks, 75-2812;
Jourcieux, mineralogy of pseudobauxite,
 5-2961
 CORSICA, Jurassic-Cretaceous granitic
 eries, 75-1416
 kditionite, *Nevada*, new mineral, opt.,
 X-ray, 75-1390
 klin, *New Jersey v. USA*
 klin, *NWT v. Canada*
 klinite, *Czechoslovakia*, anal., opt.,
 5-2475
 errick Co., *Virginia v. USA*
 eslebenite, structure detn., 75-856;
 pain, crystal structure, 75-172
 ont Co., *Wyoming v. USA*
 isite v. mica
 arite, *Poland*, mineralogy, 75-2459;
Australia, in sandy soil, 75-3895
 r's earth, *USA*, 75-638
 ic acid, interaction with Cu^{2+} mont-
 morillonite, 75-112
 Fumarole incrustations, *Central America*,
 in active volcanoes, 75-606
 Furnace, light, for single crystal synthesis,
 75-1004
 GABON, seismic traverses across con-
 tinental margin, 75-2903 [21]; *Oklo*
 mine, heavy rare gases in old uranium
 deposit, 75-2318
 Gabbro, metamorphic succession, 75-3833;
Aberdeenshire, *Huntley*, 75-700; deep
 weathering, 75-828; *Norway*, 75-561;
 trace elements of gabbro/amphibolite
 transitions, 75-658; *Czechoslovakia*,
 porphyries, 75-591; pyroxene in, 75-
 3473; gabbro-peridotite massif, 75-787;
Yugoslavia, within ultramafic massif,
 75-3695; *USSR*, granitoids, 75-1448;
Russian SFSR, Au content, 75-2219;
South Africa, Birds River complex, 75-
 2619; *India*, petrog., 75-1453; *Japan*,
 actinolite-hornblende in, 75-2422;
Western Australia, metamorphosed, 75-
 2722; *British Columbia*, palaeomagnetism,
 75-696; *Newfoundland*, age of horn-
 blende gabbro complex, 75-738; *Green-*
land, layered, 75-2393; *Surinam*, Ni and
 Cu contents, 75-340
 Gadolinite, synthesis and study, 75-304;
USSR, 75-212; *India*, anal., 75-453
 Gadolinium, partitioning in system diopside-
 aqueous vapour, 75-286
 Gagarinite, geothermometer, 75-2330
 Gahnite, *Czechoslovakia*, opt., X-ray, 75-
 2475; *USSR*, in leucocratic granites,
 anal., opt., X-ray, 75-3538; *Georgia*,
USA, 75-310
 Gaidonnayite, *Quebec*, new mineral, anal.,
 opt., X-ray 75-3596
 Galapagos Is. v. *Pacific Ocean*
 Galena, hydrothermal transport and deposi-
 tion, 75-922; hydrothermal sphalerite-
 galena replacement, 75-1035; formation
 of stalaclitic crusts, 75-2112; *Wales*,
 75-932; *Ireland*, Hg-determination,
 75-765; *Germany*, 75-202, 937; argenti-
 ferous, 75-934; *Switzerland*, 75-3104;
 3105; *Spain*, deposits in limestone, 75-
 1984; *Greece*, 75-2022; *Turkey*, 75-972,
 973; *Poland*, 75-970; native Au in, 75-
 2467; in Lower Triassic sandstones,
 75-941; trace elements, 75-940; *USSR*,
 intergrown with matildite, 75-1365;
Russian SFSR, 75-977; *India*, 75-1996;
Korea, rare surface structures, 75-2737;
Australia, 75-1143; *Colorado*, 75-988;
Greenland, 75-1397, 2497; *Nicaragua*,
 epigenetic deformation and recrystal-
 lization, 75-2045; *Peru*, 75-2010
 Galilee v. *Israel*
 Gallium, detn. in coke and coal, 75-1789;
Greenland, in *Skaergaard* rocks and
 minerals, 75-2234
 Gamma radiation, colouring gem minerals,
 75-1097
 Gamma-ray spectrometry, euxenite, poly-
 crase, and aeschynite, 75-3549; detn.
 of U, Th & K in Cainozoic basalt,
 andesite and dacite, 75-352
 Ganga R. v. *India*
 Gardar v. *Greenland*
 Garnets, chem. & phys. props. related, 75-
 2405; silicate, 3d levels of ferrous ions,
 75-3002; crystal field relations of octa-
 hedral Fe^{3+} ions, 75-3003; grain surface
 etching, 75-3458; crystallization rate in
 metamorphic rocks, 75-2402; coexisting
 with ilmenite, synthesis, 75-3170; free
 energies of mixing, 75-2135; synthetic
 Cd-Al and Ca-Mn, 75-2141; coexisting
 with orthopyroxene, alumina solubility,
 75-281; Fe-Mg partitioning with clino-
 pyroxene, 75-2136, 2399; Gd-Ga garnet,
 opt., phys., 75-307; spectrum of Fe^{2+}
 ions in silicate garnets, 75-147; iron-
 silicate garnet, shock induced phase
 change, 75-2139; U-Fe garnet, magnetic
 anisotropy and NMR, 75-2726; — cor-
 dierite equilibrium, 75-3142 (IV. 5); in
 metapelites, 75-654; in coronas of meta-
 morphosed dolerite, 75-657; role in
 eclogitic assemblages, 75-1007; por-
 phyroblasts, inclusions in, 75-3457;
Northumberland, 75-931; *Ireland*, atoll-
 shaped, 75-1288; *Germany*, 75-1628;
Italy, from eclogites, 75-2701; composi-
 tional variations, 75-1292; *Spain*,
 compositions and zoning, 75-1289; in
 graphic hornfels dykes, 75-2684; *Norway*,
 from eclogites, 75-2695; *Russian SFSR*,
 in Late Mesozoic extrusives, 75-445;
Kenya, gem, anal., opt., X-ray, 75-2185;
South Africa, from kimberlite pipes,
 X-ray, opt., 75-2613; *India*, from sakar-
 sanites, 75-444; from eclogites and
 garnetiferous biotite, gneiss, anal.,
 75-449; coronites from amphibolites,
 75-2719; in gneisses, Ag content, 75-
 2218; from anorthositic-basic granulite
 contact, 75-2404; *Indian Ocean*, in
 calcite chalk, anal., opt., X-ray, 75-2401;
Japan, 75-1635; Ca in zoned crystals,
 75-443; *Malaysia*, in pyroxenites, 75-
 2715; *Australia*, from garnet pyroxenite
 xenoliths, 75-258; *New South Wales*,
 75-3112; in clinopyroxenite, 75-572;
Western Australia, from granulites, 75-
 1298; *New Caledonia*, from blueschists,
 major element partitioning, 75-462;
China, vanadian, anal., opt., X-ray, 75-
 2403; *USA*, 75-1643; *Connecticut*,
 mining history, 75-2763; *Florida*, micro-
 textures with SEM, 75-2671; *USA*,
Georgia, in sediments, 75-2672; *Idaho*,
 asterism, 75-712; *Kansas*, 75-1591; *New*
York, 75-710; *N-W Territories*, kinetics
 of crystallization, 75-3455; *Ontario*,
 garnet-bearing gneisses, 75-2723; *Bering*
Sea, on continental shelf, 75-3802;
Brazil, 75-677; *Venezuela*, in gneisses,
 75-675
 —, almandine, replacement by biotite,
 75-3266; thermally modulated absorp-
 tion of Fe^{2+} , Fe^{3+} , Mn^{2+} , 75-1889;
 zoning in pyrope-almandine, 75-448;
France, almandine-pyrope, 75-1604;
Western Alps, diffusion processes, 75-
 3456; *India*, from charnockite series,
 75-488; *Pakistan*, from hornblende
 group, 75-2406; *USA*, *Georgia*, 75-310;
Vermont, in metavolcanic rocks, 75-
 442; *Ontario*, 75-673
 —, andradite, phase relations, X-ray, 75-
 2137 andradite-grossular solid solution,
 thermal behaviour, 75-2138; andradite-
 quartz stability relations, 75-1053;
Italy, chem. and genesis, opt., 75-1290;
Russian SFSR, dispersed in jasper,
 75-1099; *India*, in feldspathic rocks,
 75-463; *USSR*, andradite-grossular in-
 clusions in sologonite, 75-559
 —, demantoid, 75-306; *Korea*, anal., opt.,
 X-ray, 75-3311
 —, goldmanite, first *USSR* find, 75-447
 —, grossular, chrome-, imitations, 75-
 1088; phase relations, 75-1073;
 chromian, 75-306; crystal structure at
 elevated temperatures, 75-3001; *Africa*,
 red and green opt., 75-1087; *Tanzania*,
 cut stones, opt., 75-2186; *Kenya*, vana-

- Garnets (*contd.*)
 dian, anal., opt., X-ray, 75-3313; *Vermont*, overgrowths on almandine, 75-442
 —, hibschite, *Czechoslovakia*, in gabbro-peridotite massif, 75-787
 —, hydrogarnet, resistance to sulphate attack, 75-3249; phases in kaolinite-lime-water slurries, 75-3250
 —, knorringite, inclusions in olivine, 75-437
 —, pyrope, crystal structures at elevated temps., 75-3001; transformation to silicate perovskite, 75-2140; zoning in pyrope-almandine, 75-448; inclusions in olivine, 75-437; pyrope-spessartine, opt., 75-1098; *Germany*, 75-1291; *Russian SFSR*, in diamond-bearing serpentinite, 75-1293; *Arizona*, 75-3712
 —, spessartine, melting at high pressure, 75-1054; thermally modulated absorption of Fe^{2+} , Fe^{3+} , Mn^{2+} , 75-1889; *Germany*, 75-2407; *Czechoslovakia*, 75-591; *USSR*, yttrium spessartine-almandine, 75-212; *Vermont*, overgrowths on almandine, 75-442
 —, ugrandite, *Norway*, chromian, 75-2400
 —, uvarovite, 75-306; low pressure stability, X-ray, opt., 75-3247; synthesis, 75-3248
 Garnierites, compositional and structural variations, 75-3501; serpentine component, 75-486; *Western Australia*, high-Ni, 75-2439; *New Caledonia*, Ni^{2+} optical absorption spectrum, 75-3502
 Garrelsite, *Utah* and *California*, in Green River formation, 75-544
 Garnonite v. zeolites
 Gas, sorption in clay mineral systems, 75-83; *Hawaii*, magmatic, composition, 75-1503
 —, natural, reserves, and continental drift, 75-906; generation during subsidence of sediments, 75-3370; hydrochemical indicators, 75-405; *Arizona*, resources, 75-963
 —, rare, in carbonaceous chondritic xenolith, 75-427
 Gas chromatography, identification of steranes and triterpanes, 75-1794; water in clay minerals, 85-1830, 1821
 Gas pools, *USSR*, size related to thickness of clayey cap rocks, 75-1003
 Gaspeite, magnesium stability in air and inert atmosphere, 75-3233
 Gastunite v. haiweeite
 Gaurdak v. *USSR*
 Gedrite v. amphibole
 Gedrites, *Czechoslovakia*, garnet-, from metabasite, 75-2707
 Gehlenite, stability, 75-1073
 Gemstones, possibilities for synthesis, 75-1113; methods of synthesis, 75-1114; identification 75-1115, 1116, 1117; detn. of S.G., 75-1118; inclusions distinguishing natural and artificial, 75-1119; imitations in King Willem I collection, 75-1103; *Hawaii*, localities, 75-715
 Genthelvite, *USSR*, 75-212
 Geochemical data, threshold value selection, 75-2204; pattern recognition, 75-760
 —, prospecting, elemental associations, 75-2325; analytical extraction and soil profile sampling, 75-2328
 —, systems, complexity measure, 75-2203
 Geochemistry, textbook, 75-61; handbook, 75-1813; reference samples, 75-3420; applied, and community, 75-1225
 Geochronology v. age determination
 Geomagnetic reversals, *Romania*, in Pliocene volcanic rock, 75-1710
 Geophysical prospecting, book, 75-784
 Georgia v. *USA*
 Geosec programme, 1972-1973; 75-2300
 Geothermal resources, for electric power, 75-3744; *USSR*, Hercynian aulacogens, 75-3865; *Red Sea*, 75-942; *California*, 75-3745
 Geothermometer, use of coexisting calcite-ankerite solid solutions, 75-536
 Geraldton, WA v. *Australia*
 Germanates, elastic props., 75-1012
 Germanium, detn. in coke and coal, 75-1789; distribution in coal beds, 75-1184; geochem. affinity with metal, silicate, and sulphide phases, 75-1013; *India*, in coals, 75-2230; *Burma*, in sphalerite, 75-2492
 —, compounds, $\beta\text{-GeSe}_2$, synthesis and structure, 75-3214
 GERMANY, *Bavaria*, limonitic and sideritic iron ores, 75-936; granites and pegmatites, 75-1443; *Hagendorf*, stewartite, 75-1945; *Nabburg-Wölsendorf*, fluorite deposits and pegmatites, 75-937; *Pleystein-Hagendorf*, fluorite deposits and pegmatites, 75-998; *Bavarian forest*, igneous and metamorphic rocks, 75-1626; progressive metamorphism in Moldanubicum, 75-1627; *Bavaria*, *Leuchtenberg* and *Flossenbürg*, age of granites, 75-1708; *Bergsträsser Odenwald*, granodiorite porphyries, 75-3694; *Black forest*, genesis of granite, 75-2598; hornblende syenite, age, 75-2238; ages of two-mica granites, 75-1707; *Münstertal*, Hercynian dykes and volcanics, 75-3662; *Nordrach*, tungsten minerals, 75-1985; *Wittichen*, secondary minerals in Co-Ni-Ag-Bi-U ore veins, 75-935; *Black forest* and *Erzeberg*, chlorotile-mixite group, 75-2505; *Cornberg*, azurite in sandstone, 75-2118; *Darmstadt*, minerals of viridine hornfels, 75-2407; *Fränkische Schweiz*, *Eibengrotte cave*, protodolomite, 75-1373; *east Friesland*, Holocene sediments, palaeosalinity and environment, 75-1168; *Hanover*, salt zones in Zechstein horizon, 75-371; *Harz Mts.*, granite-hornfels/slate contact, trace elements, 75-2237; *Andreasberg*, harmonic structure, 75-1913; samsonite, 75-1934; *Grund*, Pb-Zn deposits, 75-934; *Winterberg*, calcite 'excentriques', 75-1369; *Wolfsberg*, plagioclite, 75-1933; *Wolkenhügel mine*, baryte deposits, 75-236; *Hauzenberg*, pseudowollastonite, from graphite mines, 75-1305; *Hegau*, zeolites in melilite-nephelinite, 75-3529; *Hessen*, *Wetterau*, glauconite, 75-1319; *Hühnerkobel*, phosphate minerals, 75-2756; *Johanneszeche*, *Göpfersgrün*, soapstone deposit, 75-994; *Kinzigtal*, Co-Cu-As-Ag mineralization, 75-2755; *Königshall*, szabelyite, 75-3059; *Kreimbach-Niederkirchen*, palatinites, 75-2597; *Malsburg* granite, statistical data, 75-3350; *Meggan* and *Rammelsberg*, fold styles in orebodies, 75-1986; *Münchenberg mass*, eclogites, *Münchenbergmassif* and *Fichtelgebirge*, metamorphism and tectonics, 75-1624; *Odenwald*, titanopyroxenes in nepheline syenites, 75-285; metamorphism of basic-ultrabasic assemblage, 75-1628; *Mackenheim*, new pitchblende occurrence, 75-969; *Rayershausen*, strontionorites, 75-2482; *Rhenisch Schiefergebirge*, disintegration of greywackes and sandstones, 75-1546;
 Rhine, graben region, igneous rocks, 3356; *Ries*, meteorite crater, impact, 1278, 1279, 1281; outcrops and quarries, 75-1280; *Rothaargebirge*, sericite, 75-833; *Ruhr* and *Rheinisches Schiefergebirge*, baryte occurrences, 75-2052; *Sauerland*, *Suttrop*, authigenic quartz, 75-1332; *Siebbegebirge*, weathering of trachytic tuffs, 75-834; *Spessart Fore Christiane mine*, baryte deposits, 75-232; *Sprollenhäus*, age of muscovite granite, 75-1207; *Swabian Alps*, meteorite impact crater, 75-1281; *Tegernsee*, heavy metals in lake sediment, 75-33; *Tessin*, ultramafic rocks, 75-1291; *Vogelsberg*, ages of tholeiitic and olivine basalts, 75-1706
 Gerona v. *Spain*
 Gersdorffite, *Western Australia*, 75-3886
 Ghost Lake, N-W Terr. v. *Canada*
 Gibbs free energies, measurement, 75-314 (I. 9); of aluminous minerals, 75-2081 of layer silicates, 75-1063
 Gibbsite, solubility product, 75-2928; in granitic sands, 75-2959; *Portugal*, on soils, 75-1853; *Norway*, structure refinement, 75-170
 Gibraltar arc, Miocene volcanism, 75-372
 Gila Co., *Arizona* v. *USA*
 Gillespite, I & II, crystal structure, 75-19
 Gilsum, *New Hampshire* v. *USA*
 Gironde R. v. *France*
 Gjerstad v. *Norway*
 Glacial deposits, quartile-deviation/media diameter relationships, 75-1536
 Glacier, *Greenland*, chem. composition, 75-2296
 Gladite, crystal structure, 75-3038
 Glass, optical props., 75-3862; IR spectra 75-59; crystallization in system $\text{MgO-Al}_2\text{O}_3\text{-SiO}_2$, 75-1055; volcanic, water and fission-track annealing, 75-2092; silicate, oxidation state of Eu, 75-1068 1069; rock, for electron probe analysis 75-1734; phonolitic, analytical standards 75-411; basaltic, experimental palaeoionization, 75-3175; pyrogenic, laser beam action on volcanic rocks, 75-256
 Iceland, heterogenous, from tephra sheet, 75-346; volcanic, *Russian SFSR*, containing native Hg, 75-512; *Victoria*, fused biotite and quartz, anal., 75-147
 California, in high-alumina olivine tholeiite, 75-1484; *Quebec*, in impact crater, fluid immiscibility, 75-435
 Glauconite, *Germany*, 75-2755
 Glauconite, heated, potassium exchange, 75-816; in marine sediments, 75-826; *France*, isotopic study of alteration, 75-2435; *Germany*, anal., 75-1319; *Italy*, compared with celadonite, anal., 75-2434; *Spain*, phosphate-carbonate associated, 75-3387; *Spain/Portugal*, 75-3506; *California*, morphological types, 75-3505
 Glauconite, *China*, in fracture zones, 75-1634
 Glauconite rocks, *Crete*, associated with metapelites, 75-2712
 Glaukosphaerite, *Western Australia*, new mineral, chem., opt., X-ray, 75-552, 3886
 Glencoe, *Argyll* v. *Scotland*
 Glimmerite, *Russian SFSR*, phlogopite, 75-643
 Gloucester, NSW v. *Australia*
 Gneiss, in system quartz-orthoclase-albite, 75-1464; *Scotland*, Rb/Sr isotope studies, 75-1700; *Lewisian*, chem. and origin, 75-3399; *Outer Hebrides*, age

- contd.)
 origin, 75-725; *Austrian Alps*, containing deformed sodic plagioclase, 75-726; *Swiss Alps*, 75-3867; *Italy*, alusite and sillimanite at granite contact, 75-1606; *Norway*, 75-561; pelite mineralization, 75-1979; radioelements in, 75-2284; garnet lherzolite equilibration temperatures, 75-2590; *Czechoslovakia*, preferred orientation cordierite in, 75-2708; *Malawi*, age detn., 75-663; *Rhodesia*, 75-2610; *Swaziland*, 75-3641; *South Africa*, lithic, origin, 75-3702; petrogeology, 75-2853; *India*, Ag distribution, 75-2218; lithic, petrographic study, 75-2718; *India*, migmatitic, 75-571; *Western Australia*, origin of amphibolite and diagenetic granulite bands, 75-1636; *Canada*, met-cordierite-sillimanite bearing, 75-2723; *Quebec*, biotite and hornblende ages, 75-2837; *Canadian Arctic*, metamorphic, 75-3192; *Rb/Sr* ages, 75-2835; *Greenland*, age detn., 75-734, 735, 1720; *India*, Precambrian, origin, 75-3614; *India*, petrology, 75-3615; *Surinam*, mesoperthite, existing sapphirine and quartz, 75-2726; *Venezuela*, cordierite, 75-675
- India*
India v. *Sweden*
India v. *Norway*
India v. *Greenland*
 interaction with water, 75-266; reaction goethite = hematite + water, 75-3192, 3193; aluminian, in kaolinite, 75-1816; lunar, 75-1253; formation on Mars, 75-2785; *Switzerland*, 75-3104; *India*, DTA, 75-974; *India*, reflectivity, 75-516; *Colorado*, 75-2765
- Heights v. Israel*
 detn. in rocks, minerals and ores, 75-1775; detn. in ores by AAS, 75-1775; detn. by AAS, 75-767; in bauxite, 75-3337; assimilation by pyrite, 75-12; detrital, experimental abrasion, 75-3146; particle settling in water, 75-171; distribution between Ni-Fe and Fe melts, 75-312; in pegmatites, 75-2758; *Atlantic Ocean*, in igneous rocks, activation anal., 75-343; *Czechoslovakia*, in magnetite skarns, 75-2287; *USSR*, fineness and particle size, 75-948; *Precambrian basement rocks*, 75-210; *Russian SFSR*, migration in metamorphic rocks, 75-1192; neutron activation anal. in rocks and minerals, 75-2219; *Ukrainian SFSR*, in iron ore, 75-3338; *N-W Black Sea*, in coastal lagoonal sands, 75-944; *South Africa*, distribution and particle size in *Witwatersrand* reefs, 75-62; *China*, skarns and hydrothermal Cu deposits, 75-1998; *New Zealand*, mineralization, 75-2038; *Pacific Ocean*, in sediments, 75-3369; *Colorado*, 75-2766; *Montana*, allanite, X-ray 75-3603; *Canada*, in Precambrian rocks, 75-1230
- deposits, age of Au-U placers, 75-3087; relationship to Fe-rich Precambrian sedimentary rocks, 75-193; *Ireland*, mining, 75-3081; *Switzerland*, placers, 75-3084; *Finland*, vein deposits, 75-1998; *USSR*, containing küstelite, 75-562; *Egypt*, dispersion haloes, 75-2337; *South Africa*, depositional environment, 75-1967; *Australia*, 75-953, 954; *Western Australia*, 75-3019; *California*, history of mining, 75-718; in ancestral river valley, 75-2007; *Colorado*, fluid inclusion studies, 75-3070; *Nevada*, Ti-bearing pigment, 75-527; *North Carolina*, 75-2003; *Tennessee*, 75-2002; *Wyoming*, 75-1437
- , native, mosaic crystal texture, 75-1347; annealing history, Au-Ag diffusion rates, 75-3531; *Sardinia*, 75-968; *Poland*, in arsenopyrite and gold, anal., 75-2467; *Colorado*, 75-988
- Goldmanite v. garnet
Golfe du Lion v. France
Golfi di Taranto v. Italy
Goluchowice v. Poland
Gondwanaland, Palaeozoic reconstruction, 75-3872
- Gordon, Samuel G., biography, 75-719, 2772
- Goslarite, *Colorado*, 75-2766
- Graham Land v. Antarctica*
 Grain-size analysis, using electromagnetic surface measurements, 75-2863
- Gran Canaria*, Canary Is. v. *Atlantic Ocean*
Gran Paradiso v. Italy
Grand Canyon, Arizona v. *USA*
- Granite, classification & nomenclature, 75-575; past and present, 75-2584; historical-geological aspects, 75-2585; origin, recent investigations, 75-2600; petrogenesis and mineral exploration, 75-2622; autochthonous origin, 75-2692; dating by K/Ar method, 75-2798; SEM and melting experiments, 75-3171; thermoluminescence, 75-3863; XRF detn. of Zr, 75-45; albitized, corrosion of zircon, 75-1009; containing amazonite, 75-489; in system quartz-orthoclase-albite, 75-1464; weathered, alteration of biotite, 75-1871; biotite-sulphide equilibria, 75-2209; equilibrium of Zn in chloride solutions, 75-2085; *SW England*, radiogeologic study, 75-2233; magmatism and tin mineralization, 75-199; Zn and Cu distribution, 75-3353; *Cornwall*, U distribution, 75-3352; concealed roof, 75-2545; porphyries, 75-3688; *North Yorkshire*, age detn., 75-3686; *Scotland*, timing of intrusion, 75-1402; *Rockall Bank*, aegirine-, 75-1515; *Ireland*, 75-3657, 3658; gravity anal., 75-3623; stratigraphy of Lower Palaeozoic rocks, 75-563; structural setting, 75-564; *France*, inclusions in, 75-3659; tin geochem., 75-3351; surface weathering, 75-2975; U mineralization, 75-323; U transport, 75-3689; sills, muscovite, 75-590; two-mica, 75-3691; in *Morvan* syncline, 75-589; *Portugal*, 75-1598; containing tourmaline, 75-1136; *Italy*, 75-2601; anisotropy, 75-1469; containing chlorite, 75-2437; *Sardinia*, petrog., 75-2546; minor element variation, 75-3344; *Germany*, 75-1443; age detn., 75-1708; statistical data, 75-3350; genesis by anatexis and differentiation, 75-2598; trace elements, 75-2237; ages of two-mica and muscovite granites, 75-1707; *Swiss Alps*, 75-3867; *Sweden*, polydiapirism, 75-3683; post-magmatic differentiation, 75-2592; *Norway*, 75-561; Rb/Sr isochrons, 75-2800; *Czechoslovakia*, porphyries, 75-591; *Poland*, biotite mineralogy, 75-472; *USSR*, stanniferous rare-metal, augelite, 75-539; leucocratic, containing gahnite, 75-3538; *Russian SFSR*, tin-bearing, 75-2212; Late Hercynian, containing zircon, 75-439; fine grained biotite granite, inclusions in quartz, 75-332; *Egypt*, petrogenesis using biotites, 75-1314; 1315; *Nigeria*, age and origin, 75-2818; *Ivory Coast*, age detn., 75-2817; *Morocco*, age detn., 75-2814; *Upper Volta*, 75-3667; *Malagasy*, age detn., 75-2821; *Central African Repb.*, weathered, trace elements in kaolinite, 75-1852; *Rhodesia*, 75-2610; K/Ar age detn., 75-1713; granite-gneiss domes, 75-2609; *Rhodesian craton*, 75-2608; *Swaziland*, Precambrian, 75-2618; *Angola*, Rb/Sr geochron., 75-6; *South Africa*, petrochem., 75-3701; *India*, 75-580, 1473; petrochem., 75-598, 666, 2571, 3354; dating of Dalhousie granite, 75-13; trace element distribution, 75-2240; fission track ages, 75-12; biotites from, 75-2429; *Japan*, trends and average comp. from 1200 anal., 75-328; RE distribution, 75-327; *China*, Mesozoic, petrochem.-geochem. characteristics, 75-334; Be content, 75-3345; Ta, Nb, W, Be-mineralized 75-3108; *New South Wales*, New England, batholith, 75-1432; *Queensland*, tin mineralization, 75-2213; *Victoria*, partially fused blocks, 75-1476; *Western Australia*, age detn., 75-2827; *California-Nevada*, petrog., 75-1483; *Colorado*, 75-3711; Fe-bearing minerals in, 75-2628; mineralogy, 75-2765; *Minnesota*, classification using XRF, 75-46; Ba geochem., 75-2285; *Missouri*, chem. weathering, geochem., geochron., 75-19; *N. Carolina*, zeolites at diorite-granite contact, 75-652; *Quebec*, pluton, major and trace elements, 75-3359; *Greenland*, discordant U/Pb ages of zircons, 75-2834
- Granitic crust, stages in evolution, 75-2583
- magmas, computer model for genesis, 75-2586; deep origin, 75-2624; source material ⁸⁷Sr/⁸⁶Sr ratios, 75-329; *Nova Scotia*, coexisting basaltic magma, 75-3355
- ring complex, *Aberdeenshire*, 75-2593
- systems, experimental studies, 75-2094
- Granitoids, muscovites from, 75-3494; *Czechoslovakia*, in Bohemian massif, 75-2711; durbachitic, containing platy K-feldspars, 75-1325; *Poland*, geochem. study, 75-335, 336; *USSR*, classification and nomenclature, 75-1448, 2824; K/Ar ages, 75-7; *Russian SFSR*, effect of volume factor, 75-3697; evolution of accessory zircon, 75-2398; *Botswana*, 75-3641; *California*, in *San Andreas*, fault system, 75-574
- Granodiorite, melting at grain boundaries, 75-1016; *Ireland*, age, 75-2808; *Sardinia*, 75-2566; *Germany*, porphyries, 75-3694; *Italy*, plagioclase and K-feldspars in, 75-1337; *Czechoslovakia*, porphyries, 75-591; *Russian SFSR*, Au content, 75-2219; *Malagasy Repb.*, pegmatic, 75-1445; *Washington*, natural remanent magnetization, 75-2750; *Labrador*, pyroxene-olivine-quartz assemblages in, 75-602; *Colorado*, Rb/Sr dating, 75-1725; *Greenland*, autochthonous, 75-3613
- Granophyre, *France*, feldspars in, 75-3514
- Granosyenite, *Czechoslovakia*, 75-591
- Grant Co., Oregon v. USA*
- Granulite, lunar, 75-1254; troctolitic, from lunar rock, 75-2343; *Argyllshire* retrogressive metamorphism, 75-1189; *Rockall*, 75-1513, 1514; *Austria*, ferromagnesian minerals in, 75-3834; *Norway*, 75-561; *Africa*, preliminary note, 75-3837; *Malawi*, 75-663; *India*, 75-1633; basic, hornblende porphyroblasts in 75-667; garnets from, 75-2404; *Australia*, xenoliths, geochem. and high pressure studies, 75-258; *Western Australia*, bands

- Granulite (*contd.*)
 in Precambrian gneisses, 75-1636; pyroxene-, 75-2722; containing aluminous orthopyroxenes, 75-1298; *Surinam*, of sedimentary origin, 75-676; *Brazil*, thallium content, 75-330
- Granulite-charnockite suite, *France*, 75-659
- Granulometry, statistical correlation, 75-2862
- Granville Co., *North Carolina v. USA*
- Graphite, heat transport measurements, 75-2734; in pyrope-peridotite, 75-2256; in pegmatites, 75-2758; detn. of facies and type of metamorphism, 75-513; *USSR*, in meteorite impact rocks, 75-3450; *Sri Lanka*, mineralization and tectonic control, 75-949; *Japan*, from metamorphic rocks, 75-671
- Gratonite, structure refinement, 75-1937
- Gravimetric analysis, *Egypt*, iron ores, 75-974
- Gravity survey, *Antarctica*, 75-586
- Great Barrier I. *v. New Zealand*
- Great Lakes *v. North America*
- GREECE, drainage and soil geochem. surveys, 75-1227; tectonics and mineralization in Tethyan region, 75-1958; *Aegina*, petrol. and geochem. of volcanic rocks, 75-3726; *Chios*, volcanic rocks, 75-2638; *Crete*, chloritoid-bearing metapelites, 75-2712; *Distomon*, pyrite in bauxite, anal., 75-2484; *Euboea I.*, piemontite, 75-2410; *Hellenic arc*, Sr isotopes in volcanic rocks, 75-3358; *Macedonia*, supergene alteration of ophiolites, 75-3789; *Milos*, clay mineral study, 75-2985; *Mt. Olympus*, geol., 75-3632; *Ossa and Olympia*, high *P* and low *T* mineral parageneses, 75-3835; *Othris*, petrol. of ophiolites, 75-609, 610; igneous activity at birth of ocean basin, 75-611; *Pindos*, ophiolitic metabasic rocks, 75-386; *Santorini*, tuffs, 75-2637; *Thrace*, magnetic biotite samples, 75-687; *Xanthi*, Mo-W-Cu deposit, 75-2022
- Greenalite, *Canada*, 75-221; *Greenland*, 75-2040
- GREENLAND, Tertiary lavas, 75-2588; layered gabbros, 75-2395; palaeomagnetism from Early Tertiary lava flows, 75-3873; horizontal tectonic regime in Archaean, 75-1601; chem. composition of glacier, 75-2296; *Angmagssalik*, K/Rb ratios of anorthosite veins, 75-2289; metamorphism of *Charcot Land* sequence, 75-3820; *Eleonore Bay* group, Precambrian ages, 75-2833; *Fiskenæsset*, geol. of area, 75-3607; fluvial sands, min. & chem., 75-2655; sapphirine and kornerupine occurrences, 75-3611; metasomatism at contacts, 75-3612; autochthonous granodiorites, 75-3613; origin of gneisses and amphibolites, 75-3614; petrog., 75-3615; *Fiskenæsset*, *Nordland*, and *Sukkertoppen*, ages of granulite facies gneisses and anorthosites, 75-735; petrol., chem., etc. of *Qegertarsuatsiaq* rocks, 75-3608, 3609; *Frederikshåb*, Precambrian ultramafic rocks, 75-3616; U/Pb ages of zircons from granite, 75-2834; *Gardar*, rock analyses from Precambrian filing system, 75-417; alkalis in peralkaline phonolite dyke, 75-2243; *Godthaab*, event in geol. evolution, 75-734; *Ilimaussaq* intrusion, Be mineralization, 75-1340; colour of ussingite, 75-3526; Cu-Sb-sulphide-oxide occurrences, 75-2497; trona and thermnatrite, 75-3582; skinnerite, new sulphosalt, 75-1397; *Isua* iron formation, age detn., 75-1719; *Kangerlugssuaq*, dyke swarm and gabbroic inclusions, 75-3681; *Kap Farvel-Prins Christian Sound*, post-tectonic intrusions and gneisses, 75-1720; *Ketilidian*, Precambrian organic compounds, 75-3372; *Majorqapqáva* outcrop, igneous structures and textures, 75-3610; *Midternæs*, unmetamorphosed iron-formation, 75-2040; *Niaqornat*, volcanic breccia, 75-3655; *Nûgssuaq*, ferri-sepiolite, 75-2443; *Skaergaard* intrusion, chilled margin phase equilibria, 75-255; efficiency of fractionation, 75-3347; Ga in rocks and minerals, 75-2234; Hg in rocks and minerals, 75-2235; trace element behaviour, 75-1161; pyroxene crystallization trends, 75-3471; *Svartenhuk Halvø*, geol., 75-3656; *Ubekendt Ejland*, Sr isotopes in igneous province, 75-2244
- Greenockite, *Spain*, in hydrothermal alteration zones, 75-2494
- Greenschists, in system CaO-MgO-Al₂O₃-SiO₂-CO₂-H₂O, 75-247; *France*, metamorphism in *Mont Blanc massif*, 75-1615; *Cyprus*, 75-1521; *Switzerland*, ore deposits in, 75-938; *India*, mineralogy of chlorite and talc, 75-481
- Greenstone, *Cornwall*, metasomatism, 75-3815; U distribution, 75-3352; *Mid-Atlantic Ridge*, synthesis of organic matter, 75-313; *Rhodesia and Botswana*, deformation patterns, 75-2716; *Tasman geosyncline*, 75-3771
- Greisenization, *Portugal*, of granites, 75-1598; *USSR*, zoning parallel to ore bodies, 75-945
- Greywacke, *Cornwall*, quartz veins, geochem., 75-388; *Germany*, spherical or ellipsoidal formation during disintegration, 75-1546; *Poland*, from coal basin, 75-3786; *South Africa*, ash beds and volcanic fragments in, 75-3798
- Grossular *v. garnet*
- Grovesite, *N. Carolina*, X-ray, 75-2523
- Grund *v. Germany*
- Grüneison parameter, of solids under high *P*, 75-2744
- Guadalupe delta, *Texas v. USA*
- Guanglinite, *China*, new mineral, anal. X-ray, opt., 75-2522
- Guanine, *Western Australia*, new organic mineral, 75-553, 3886; *Peru*, 75-553
- GUATEMALA, Pb-Zn mineralization in carbonate rocks, 75-3095; *Fuego volcano*, recent ash flows, 75-3749, 3750; *Pacaya* and *Santiaguito* volcanoes, IR radiation thermometry, 75-3755; *Santiaguito* volcano, nuée ardente, 75-3757; volcanic activity pattern, 75-3756
- Guérinite, crystal structure, 75-1926
- Gujarat *v. India*
- Gulf of Aden *v. Red Sea*
- GULF OF MEXICO, continental margins, 75-2903 [51]; ironstone deposits, 75-2226; illite distribution in sediments, 75-1740; X-ray diffraction of sediments, 75-1741; *Horn I.*, heavy minerals in sands, 75-3814
- Gumma Pref. *v. Japan*
- Gunnison Co., *Colorado v. USA*
- Guri *v. Venezuela*
- GUYANA, resiliification of bauxites, 75-2008
- Gympic, *Queensland v. Australia*
- Gypsum, nucleation kinetics, 75-2116; dehydration in aqueous soln., 75-3220, 3221; EDTA dissolution, 75-2889; X-ray detn. of anhydrite in plaster, 75-2865; detrital, optical orientation and shape anisotropy, 75-3781; topotactical dehydration, 75-2115; in human pathology, 75-2515; *Nottinghamshire*, 75-1406; *Ireland*, recently formed, 75-702; *Italy*, struct. refinement, 75-174; *Poland*, in epigen. formation, 75-641; overlying mineralized sandstones, 75-941; *Crimean Mts.*, neogenic, in karst caves, 75-535; *Trucial States*, mineral genesis, 75-2662; *SW Africa*, deposits off coast, 75-2661; *Virginia*, stalactite incrustation, 75-13
- Gyrolite, *N. Carolina*, 75-2769
- Haapalaite, *Finland*, new mineral, chem., opt., X-ray, 75-3597
- Hafnium, in zircons, 75-2521
- Hafnon, *Mozambique*, new mineral, anal. x-ray, 75-2521
- Haiti *v. West Indies*
- Haiweeite, *Austria*, gastunitite Ia, 75-1677
- Halides, alkali, thermal expansion, 75-689; Rb and Cs —, Debye-Waller Factor, 75-3063
- Halite, Br, Rb partitioning, 75-2128; recrystallization by dolerite intrusion, 75-3817; in human pathology, 75-2515; *Mediterranean Sea*, Br content, 75-1180; *Dead Sea*, 75-2053; *Russian SFSR*, liquid inclusions in, 75-546; Br content, 75-3587; *India*, 75-705; *Colorado*, Br-bearing, 75-2283
- , hydrohalite, NaCl · 2H₂O, crystal structure, 75-899
- Hall Mt., *Idaho v. USA*
- Halloysite, stability diagram, 75-802; transformation, 75-3308; formed by alteration of basaltic tuff, 75-2963; reaction with acetic anhydride, 75-87; reaction with chromiferous kaolinite, 75-88; dehydration of washed potassium acetate complex, 75-99; tabular and spheroidal particles, morphology, 75-104; *Germany*, in weathered trachytic tuffs, 75-834; *Yugoslavia*, Cr-bearing, IR study, 75-1824; *Japan*, in Pliocene clay deposits, 75-126; weathering and diagenesis of granites, 75-1870
- Hampshire *v. England*
- Hannayite, in human pathology, 75-2515; *Western Australia*, 75-3886
- Hanover *v. Germany*
- Hardness, indentation, of diamond, 75-27
- Harmotome *v. zeolite*
- Harzburgite, *Russian SFSR*, contacts in ultramafic bodies, 75-642; *New South Wales*, serpentinization and opaque minerals, 75-3554
- Hastingsite *v. amphibole*
- Hatchite, crystal structure, 75-1935
- Haugsjøundet *v. Norway*
- Hawaii *v. USA*
- Hawaiites, upper mantle source, 75-2577; *Hawaii*, solubility of S in melt, 75-254
- Hawleyite, *Spain*, in hydrothermal alteration zones, 75-2494
- Haxtonite, in San Cristobal meteorite, 75-1267
- Healing effects of minerals, 75-717
- Heat flow, *Swiss Alps*, from various rock types, 75-3867; *NE Africa*, and heat flow, 75-3866; *Bermuda*, from deep drill hole, 75-698
- Heazlewoodite, *Italy*, 75-1360; *New South Wales*, 75-3554
- Hectorite *v. montmorillonite*
- Hedenbergite *v. pyroxene*
- Heideite, new mineral in meteorite, opt., X-ray, 75-554
- Heiligenbluth *v. Austria*
- Helen's Reef *v. Atlantic Ocean*
- Helium, related to petroleum hydrocarbons

- n (*contd.*)
 1214; ionic diffusion in aluminium, 75-2087; isotope ratios from micro-inclusions in quartz, 75-1138; isotopes in atmosphere, 75-3414; *USSR*, in minerals of *Volyn* pegmatites, 75-317; *Arizona*, resources, 75-963
 site, minimal reflectivity angles, 75-1138; oxygen K absorption spectra, 75-1136; structure of ilmenite solid-soln., 75-3142 (II.4); formation from iron
 (I) hydroxide, 75-3190; surface adsorption of H_2PO_4^- ions, 75-3191; reduction of magnetic field, 75-1139, 1140; reaction with hematite + water, 75-3192, 1139; coating on quartz, 75-2653; in spinel, 75-1816; ores in Precambrian iron formations, 75-3335; *Wales*, deposits, 75-621; *Germany*, 75-937, 1985, 1987; *Czechoslovakia*, in skarn deposit, anal., 75-2020; *Russian SFSR*, pigment red jasper, 75-1099; *Egypt*, DTA, 75-1134; *India*, reflectivity & VHN, 75-516; *Massachusetts*, 75-1591; *Canada*, 75-221; *Venezuela*, in gneisses, 75-675
 hydrate, hydration, 75-3158; formed by dehydration of gypsum, 75-2115; crystal growth from aqueous solution, 75-3220, 3221
 v. *France*
 spinel
 hydroxyl-, position of hydroxyl groups, 75-1947; *Brazil*, structure refined, 75-896
 v. *Germany*
 in pegmatite, 75-2755; *Switzerland*, in pegmatite, 75-1673
 site, *SW Africa*, from pegmatites, 75-113
 v. zeolite
 hydrite, *Dead Sea*, 75-2053; in human geology, 75-2515
 stibiopalladite, *China*, new mineral, anal., opt., X-ray, 75-2529
 stibionickelite, *China*, new mineral, anal., opt., X-ray, 75-2529
 v. garnet
 v. *Ka Mts.* v. *Japan*
 v. *Japan*
 shiite, *China*, new mineral, anal., X-ray, opt., 75-2522
 quilitite, *China*, new mineral, anal., X-ray, opt., 75-2522
 betsuite, *Japan*, anal., 75-531, 533; DTA, 75-532
 blende v. amphibole
 blendites, *New Caledonia*, from ultramafic belt, 75-1308
 fels, pelitic, porphyroblasts, 75-645; *Russian SFSR*, trace elements, 75-387; *New South Wales*, containing idocrase, 75-450
 spots, mobility in plate tectonics, 75-511
 springs, water and gas, geochem., 75-1198, 399; *India*, sulphur containing gases, 75-403; *New Zealand*, mackinawite and pyrite in, 75-2488; *Alaska*, geol. & chem., 75-3412; *Nevada*, argillization by descending acid, 75-138
 nerite, *Australia*, 75-954
 son R., *New York v. USA*
 speth Co., *Texas v. USA*
 site, synthesis, 75-265; *Alaska*, related to wonsenite, 75-1381
 mboldt Co., *Nevada v. USA*
 mic substances, chem. and phys. props., 75-2907 (1); acid absorption of metal ions, 75-1185; *North America*, in lake sediments, 75-2280
 HUNGARY, Triassic ore mineralization, 75-1973; minor elements in lignites, 75-2279; geochemical indicator elements, 75-2331; *Bükk Mts.*, magma and sedimentary rock interaction, 75-2681; metamorphism in volcanogenic-sedimentary sequence, 75-2698; *Severozhensk*, Cr-bearing boehmite, 75-2479; *Szeged basin*, pre-Pannonian sedimentary formations, 75-2659; *Tokaj Mts.*, perillites, 75-2633
 Hungtsoite, X-ray data, 75-2481
 Huntite, *Western Australia*, 75-3886
 Hurlbutite, *New Hampshire*, crystal structure, 75-1946
 Huy v. *Belgium*
 Hyderabad v. *India*
 Hydro-astrophyllite, new mineral, anal., opt., X-ray, 75-555
 Hydrobiotite v. mica
 Hydrocarbons, formation from solid substances, 75-260; migration in aqueous solutions, 75-405; petroleum, relation of helium, 75-1214; in saline solution, 75-1215; storage in cavities, in salt, 75-3897; *France*, in Jurassic-Cretaceous formations, 75-370; *Germany*, in Messel Oil shale, 75-1186; *Russian SFSR*, gases in ultramafic rocks, 75-3415; *Green River Formation*, in oil shale, 75-1187
 Hydrochemical zoning, inversion and tectonics, 75-3411
 Hydrochloric acid, extraction of phosphoric acid from phosphate rock, 75-240
 Hydrogarnet v. garnet
 Hydrogen, detn. in silicates with ion microprobe, 75-1759; organic, detn., in oil shales, 75-1776; isotopes in serpentinization of ultramafic rocks, 75-3395; *Cyprus*, isotopes in ophiolite serpentinization, 75-2288
 Hydrogen sulphide, *France*, in Jurassic-Cretaceous formations, 75-370
 Hydrohalite v. halite
 Hydromagnesite, *South Australia*, in stromatolites, 75-3576; *California*, crystal structure, 75-1940
 Hydroquinone, measurement of oxidative power of smectites, 75-109
 Hydrosodalite v. sodalite
 Hydrosphere, mass balance with lithosphere and atmosphere, 75-2202
 Hydrotalcite, synthesis 75-2162
 Hydrothermal minerals, *Poland*, Br and Cl in fluid inclusions, 75-331
 Hydrothermal systems, generation of N_2 - CO_2 - H_2O fluids, 75-248, 249
 Hydrothermally altered rocks, *New Zealand*, mineralogy and O isotope geochem., 75-3329
 Hydrotroilite, *New Britain*, in exhalative sedimentary environment, 75-2039
 Hydroxyl-herderite, hydroxyl bonds, 75-1947
 Hyogo Pref. v. *Japan*
 Hypersthene v. pyroxene
 Hypogene alteration, of rocks, chem. indices, 75-116
 — mineralization, *USSR*, 75-947
 Hypovolcanic rocks, *Cameroon*, 75-3698
 Ibaragi Pref. v. *Japan*
 Ice, network geometry of veins, 75-1652; phase equilibria, 75-1653; $\delta^{18}\text{O}$ profile, 75-1219
 ICELAND, aerial geological excursions, 75-791; insular margins, 75-2903 [27]; basic intrusive sheets, 75-1487; Tertiary lavas, 75-2588; low ^{18}O basalts, 75-347; basalts from mantle plume centre, 75-2642; magnetic props. of minerals from basalts, 75-2742; *Heimaey*, glass in tephra sheet, 75-346; 1973 strombolian scoria deposit, 75-2631; *Heimaey* and *Surtsey* eruptions, Sr isotopes and RE elements in basalts, 75-1155; *Reykjanes Ridge*, geochem. of mantle plume, 75-1151; Sr isotopes in basalts, 75-1152; non-primary magmas, 75-1153; chem. of tholeiites, 75-1154; *Vesturhorn* intrusion, geol., 75-1456
 Idaho v. *USA*
 Iddingsite, *Colorado*, 75-3711
 Idocrase, *Kenya*, with low birefringence, 75-1295; *New South Wales*, in calc-silicate hornfels, 75-450; *Texas*, replacing melilite in skarn, 75-644; *California*, black, 75-1294
 Igneous activity, *Greece*, at birth of ocean basin, 75-611
 — petrology, book, 75-57
 — rocks, radiometric ages, 75-1723; detn. of calcium, 75-1757; photometric detn. of V, 75-1761; Fe-Ti oxide minerals in, 75-2469; *Germany*, geochem., 75-3356; *Poland*, from borehole, 75-2567; *New South Wales*, 75-1432; *Queensland*, U-Th-Pb isotopes, 75-1717; *Montana*, 75-1458; *Texas*, geochem. study, 75-1164; *Utah*, 75-1486
 Ignimbrite, alkaline trachytic, spatial distribution of uranium, 75-353; *Azores*, petrol., 75-3768; *Canary Is.*, special kind of eruption, 75-3727
 Ijolite, *Russian SFSR*, alteration to khibinites, 75-556
 Ikaite, stability, 75-2119
 Illite v. mica
 Ilmenite, equilibria in system Fe-Ti-O, 75-261; reduction reactions, 75-1023, 1024, 1025; XRF detn. of Nb, Zr, Mn, Cr, V, Ca, 75-1783; photometric detn. of V, 75-1761; coexisting with garnet, synthesis, 75-3170; inclusions in garnets, 75-3457; structure of hematite solid soln., 75-3142 (II.4); segregation of iron, 75-917; spectral reflectance, 75-684; segregation from sands under alluvial-flow conditions, 75-1019; in mesosiderites, 75-3440; in Apollo 15 rake samples, 75-2342; in Apollo 17 breccias, 75-419; in lunar and terrestrial anorthosites, 75-418; *Northumberland*, 75-931; *Helen's Reef*, 75-2538; *Finland*, coexisting with magnetite, 75-3539; *Poland*, anal., 75-3540; *USSR*, 75-212; *Russian SFSR*, altered to leucoxene, 75-1350; inclusions in magnetite, 75-3541; *Baltic Sea*, placer deposits, 75-204; *Yemen* and *Aden*, 75-1349; *India*, reflectivity & VHN, 75-516; *Malaysia*, in pyroxenites, 75-2715; *China*, 75-515; *Pacific Ocean*, from deep-sea basalts, 75-612; *Arizona*, 75-3712; *California*, from metamorphosed ultramafic rocks, 75-653; *Colorado*, 75-3711; *Florida*, micro-textures with SEM, 75-2671; *Georgia*, in sediments, 75-2672; *Kentucky*, magnesian, isothermal compression, anal., 75-685; *New York*, 75-3312; *Greenland*, trace elements, 75-1161; *Venezuela*, in gneisses, 75-675
 Ilvaite, crystal structure, 75-860
 Imogolite, adsorption of phosphate, 75-1830; *New Guinea*, in volcanic ash soils, 75-839
 Impactites, *France*, 75-3452; uranium content, 75-3453
 Imperial Valley, *California v. USA*
 Incaite, new mineral, chem., X-ray, 75-1391
 INDIA, continental margins, 75-2903 [46]; palaeomagnetic observations of expand-

INDIA (contd.)

- ing Earth, 75-692; petrochem. of granitic rocks, 75-3354; Ge in coals, 75-2230; carnelian, 75-2190; Precambrian pegmatites, 75-1812; Miocene sharks, 75-1812; *S*, diagenetic rhombohedral calcite, 75-636; *east coast continental shelf*, trace elements in sediments, 75-1565; *Indian shield*, protocontinental growth and rift valleys, 75-2555; *Bakreswar* and *Suraj Kund* sulphur in thermal spring gases, 75-403; *Deccan Traps*, age of lavas, 75-11; *Deccan basalt*, alkaline magma, 75-2623; *Deolapar*, sulphide mineralization in impure Bichua rocks, 75-217; *Kimaun Himalaya*, baryte in Ralam-Garbyang sequence, 75-242; dolerite dykes, 75-1812; *Lesser Himalaya*, heavy minerals in Precambrian quartzite, 75-2664; *Mangalapur*, asbestos from Holenarasipur schist belt, 75-243; off *Mangalore*, shelf sediments, mineral distribution, 75-3800; opaque minerals, 75-3801; *Nerophar* pluton, 75-1473; *New Delhi*, red spotted sandstone in buildings, 75-629; *Simla Himalaya*, eclogitic rocks of Jutogh formation, 75-665; *Sittampundi complex*, sapphirine, 75-454; eclogites, 75-2745; *trans-Aravalli Vindhyan basin*, dolomitisation of Bilara limestone, 75-632; *West Bokaro* coalfield, cone-in-cone structure, 75-635; *Zawar*, diagenetic pyrite, 75-2028
- , ANDHRA PRADESH, *Amaravathi*, minerals from charnockite series, 75-488; *Chamadala*, geochem. prospecting, 75-2322; *Eastern Ghats*, nepheline as metasomatic product, 75-647; *Elagandal*, granites, 75-666; *Guntur dist.*, copper ores, 75-1996; *Kandali*, clinozoisite from pegmatite, 75-458; *Nellore*, muscovite ages, 75-1812; anthophyllite schist, 75-669; *Pakhals of Yellandlapad*, hydrobiotite, opt., 75-479; *Palvancha*, garnet coronites from amphibolites, 75-2719; *Visakhapatnam*, Ag in granitic gneisses, 75-2218; *Surma Valley*, Tertiary geosynclinal sediments, 75-1563
- , BENGAL, plagioclase from anorthosite massif, 75-2448
- , BIHAR, O and C isotope variations in limestones, 75-2268; *Doranda*, biotite from granitic rocks, 75-2429; *Santhal Parganas*, trace elements in Rajmahal basalts, 75-2251; *Singhbhum*, trace elements in granite, 75-2240; palaeomagnetism of Newer Dolerites, 75-1669; epidiorite, 75-597
- , GOA, clay dykes in sedimentary iron ores, 75-2666; *San Pedro*, mega-porphyrific dolerite intrusion, 75-583
- , GUJARAT, *Jambughoda*, mineralogy of greenschists, 75-481; *Kutch* and *Cambay basins*, post-Miocene sediments, 75-630; *Nakal* and *Amba Dongar*, carbonates and associated rocks, 75-581; *lr. Narmada Valley*, dating buried soil, 75-14
- , HIMACHAL PRADESH, *Blaini* conglomerates, 75-1812; *Dalhousie* granite, radiometric dating, 75-13; *kill-bands* in slate-phyllite, 75-1812; *Simla Hills*, ambient pyrite in slates, 75-2486; *upper Siwaliks*, petrological study, 75-2665
- , HYDERABAD, *Ghatkesar*, petrochem. of granitic rocks, 75-598
- , JAMMU and KASHMIR, *Kishtwar*, amphibolites, 75-2717
- , KARNATAKA, geochem. of Archaean amphibolites, 75-3397; *Byrapur*, kāmmererite from chromite deposits, 75-484
- , MADHYA PRADESH, *Bastar*, Rapakivi granite, 75-580; *Bopal*, segregation veins and inclusions in basalt flow, 75-2569; *Jhabua*, algal structure and phosphorite in Aravalli rocks, 75-241; *Kajlidongri mine*, piemontite from Mn ore deposit, 75-2411; *Nandini*, high phosphorus stromatolitic limestones, 75-360; *Pachmarchi*, drainage network, 75-1812; *Rahatgarh*, feldspars and lava flow direction, 75-2621; *Son valley*, *Vindhyan* sediments, 75-1812; *Tirodi*, alkali amphibole unmixing, 75-471
- , MADRAS, *Salem*, origin of iron ores, 75-2029
- , MAHARASHTRA, *Akola*, multi-aquifer system, 75-1812; *Bombay I.*, spilitic degredation of tholeiitic basalt, 75-648; *Kolaba*, lamprophyre, 75-582; *Lonar Crater*, possible meteoritic origin, 75-2392; *Poona*, vanadium apophyllite, 75-487; *Ratnagiri*, *Vajrat* gabbros, petrog., 75-1453
- , MYSORE, geochem. of basic dykes, 75-339; *Bababudan Hills*, co-existing aegirine and magnesioriebeckite, 75-465; *Bangalore*, migmatites, 75-2721; folded rocks, 75-568; *Bidaloti*, cordierite-hypersthene-anthophyllite granulite, 75-1633; *Channapatna*, pyroxene and andradite bearing feldspathic rocks, 75-463; *Chitradurga*, copper ores, 75-2030; diabase dykes and sulphide mineralization, 75-1997; *Dharwar*, Hastingsites from amphibolites, 75-1310; *Hospet*, andalusite from *Sandur* schist belt, 75-2408; *Jamkhandi*, quartz-dolerite dykes, 75-2570; *Katteri*, metamict samarskite, 75-521; *Kolar*, garnets from sakarsanites, 75-444; basaltic komatiite, 75-1423; *Mundargi-Hadagalli*, granitic rocks, 75-2571; *Nuggihalli* schist belt, sulphide analysis, 75-218; opaque minerals, 75-2473; *Raichur*, meladiabase dyke, 75-1452; micropegmatite texture in quartz dolerite, 75-1450; *Satnur-Halaguru*, charnockites, 75-2720
- , ORISSA, *Baramba*, hornblende porphyroblasts in basic granulites, 75-667; *Cuttack dist.*, Athgarh sandstone, palaeocurrent anal., 75-1562; chert bands in chromites, 75-633; *Talchir basin*, turbidites from sandstone-shale sequence, 75-634; *Tapang*, pyrrhotite, 75-230; colour of charnockites, 75-668
- , RAJASTHAN, phosphorites, 75-2514; Precambrian, superposed folding, 75-1424; *Ajmer*, zinnwaldite from pegmatite, 75-2432; *Beawar*, wollastonite paragenesis in metamorphic terrain, 75-3843; *Bikaner*, halite, 75-705; *Kolihan*, trace elements in sulphides, 75-319; *Ramgarh* meteorite crater, 75-2393; *Siker*, pyrite-pyrrhotite mineralization, 75-229; *Udaipur*, microfossil from stromatolites, 75-1812
- , TAMIL NADU, *Arcot*, geophys. survey, 75-569; *Coimbatore*, garnets, 75-449; *Madurai*, gadolinite, 75-453; *Oddanchatram*, garnets from anorthosite-basic granulite, 75-2404; block structures in anorthosites, 75-599; *Thirupattur*, vermiculite deposits, 75-1817
- , TRIPURA, Tertiary geosynclinal sediments, 75-1563
- , UTTAR PRADESH, phosphorites, 75-2514; *Ganga R.*, alluvial tectonic framework, 75-631; *Garhwal Himalaya*, *Blaini* conglomerates and metamorphic petrol., 75-1812; *Jhansi*, fission track ages of Bundelkhand granites, 75-12; *Madaura*, granitic gneisses, 75-2718; *Pauri Garhwal*, Siwalik sands, 75-1812
- INDIAN OCEAN, continental margins, 75-2903 [44-48]; cation absorption of marine clay sediments, 75-821; sediment thickness and structure, 75-1564; sediments from DSDP Leg 26, 75-2260; ultramafic associations, 75-2649; clay mineralogy and sedimentation, 75-1569; metasomatic garnets, 75-2401; framboidal pyrite, 75-2483; geochem. of manganese nodules, 75-1571, 1573; microscopy, electron probe study, 75-1572; pelagic deposits, 75-1573; Zn in nodules, 75-2229; petrol. of basalts, 75-2647; RE elements in ferromanganese nodules, 75-1144; authigenic phillipsite formation rate, 75-1568; *Indian Ridge*, serpentinized varieties of plagioclase lherzolite, 75-1523; *Indian-Antarctic Ridge*, Mn deposits, 75-1145; *Mid-Oceanic Ridge*, rock types, 75-1522; *Ninety-east Ridge*, Eocene basaltic pyroclastics, 75-2648; *Réunion I.*, laumontite, 75-1342
- Infrared radiation thermometry, from *Guatemalan* volcanoes, 75-3755
- Infrared spectroscopy, of minerals, book, 75-59; of microscopic mineral grains, 75-26; of powders, Christiansen effect, 75-27; biotites, 75-1901; Li-Fe series micas, 75-3496; synthetic garnets, 75-2141; epidotes and zoisites, 75-1892; Cr-bearing halloysites, 75-1824; bentonite-lime mixtures, 75-3163; kaolinite-mullite reaction, 75-2160; frequency calculations for mullite, 75-3004; serpentine minerals, 75-2440; zirconia polymorphs, 75-3022; Sr-bearing hydroxyapatite, 75-3053; H₂O in nepheline, 75-3525; of rock pharmacolite, 75-183; silicate micro melts, 75-3174; oxonium ions in minerals, 75-142; butylammonium complexes of phyllosilicates, 75-110; *Egypt*, haloes in Au deposit, 75-2337
- Io v. Jupiter*
- Iodide extraction, for detn. of Sn and As, 75-1774
- Iodine, stereochem. of I(V) in bellingerite, 75-184; *Russian SFSR*, in ground water, 75-395
- Ion microprobe, Pb isotope ratios, 75-1126; F and H in silicates, 75-1759; boron in chondrodite, 75-1286; carbonaceous rocks, 75-2870
- IRAN, ancient continental margins, 75-2903 [64]; tectonics and mineralization in Tethyan region, 75-1958; distribution of volcanic rocks, 75-3672; *Zagros*, seismicity and structure, 75-1422
- IRAQ, Br content of oil, 75-1216
- IRELAND, mineral exploration, 75-1974; gold mining, 75-3081; bibliog. of radiometric rock ages, 75-2807; geol. and scenery, book, 75-2915; batholithic intrusion, 75-2595; Upper Devonian and Lower Carboniferous stratigraphy, 75-3082; Caradocian volcanic activity, 75-578; *SE*, Caledonian lamprophyre swarm, 75-577; *central*, mineralization in Lr. Carboniferous, 75-1983; *Leinster* granite, 75-3658; stratigraphy of Lr. Palaeozoic, 75-563; structural setting, 75-564; chloritoid-bearing rocks, 75-452; aplites and pegmatite muscovites, zircons from, 75-441; red-feldspar pegmatite association, 75-1440; cordierite and staurolite textural study, 75-459; *Rosslare* complex,

- LAND (contd.)
 geochem., 75-3400; *Northern Ireland*, recent mineral developments, 75-1975
 ANTRIM, tholeiitic basalt, IR spectra, 75-3174
 CARLOW, Caledonian appinitic intrusives, 75-3685; *Leinster granite*, *Graiguenamanagh belt*, 75-3657
 KILDARE, palaeomagnetism from Ordovician andesites, 75-3868
 CORK, marine transgression in Cork beds, 75-622; *Glandore mine*, history and geol. setting, 75-3101
 DONEGAL, *Ardara pluton*, atoll garnets, 75-1288; *Donegal granite*, gravity anal., 75-3623
 DOWN, *South Rock*, stevensite, 75-3503
 DUBLIN, palaeomagnetism from Ordovician andesites, 75-3868
 GALWAY, *Tynagh deposit*, manganese halo, 75-322
 KERRY, Tertiary dolerite dyke system, 75-3869; *Dingle Bay-Castlemaigne Valley*, magnetic survey, 75-3870
 LIMERICK, *Carrigogunnel*, volcanic rocks, 75-588
 LONGFORD, *Keel prospect*, lattice-mercury in sphalerite, 75-765
 MAYO, Precambrian complex, 75-3625; *Achill I.*, stratigraphy and structure, 75-3624; *Westport*, magnetic survey, 75-3871
 SLIGO, *Killala*, merwinite, 75-1297
 WEXFORD, Precambrian complex, 75-3625; *Carnsore*, age of granodiorite, 75-2808
 WICKLOW, recently formed gypsum, 75-702; *Avoca*, metallogenesis in southern Caledonides, 75-1982; *Clara*, igneous breccia, 75-576
 lithium, USA, in batholithic rocks, 75-2236
 iron, materials survey, 75-909; geochem., book, 75-2909; crystal chem. and magnetic props. in Fe-Ni-S system, 75-886; ferric, direct titrimetric detn., 75-34; octahedrally coordinated to oxygen, 75-855; ferrous, potentiometric detn., 75-33; Wilson's method for detn. in silicates, 75-1756; detn. by calcite staining, 75-1772; bonding to sulphur, 75-881; in sphalerite, 75-1363; segregation from ilmenite, 75-917; Mössbauer study of kaolinites, 75-1816; in nontronite, reduction, 75-1823; oxidation state in clays and potassium selectivity, 75-90; oxidation and reduction effects in vermiculites, 75-797; Fe²⁺ in olivine, 75-146; Fe³⁺ in forsterite, 75-1886; distribution in rhodonite, 75-1898; Fe²⁺ in silicate garnets, 75-147; Fe³⁺ in α -quartz, 75-1908; in coexisting garnet and clinopyroxene solid soln., 75-2399; Fe²⁺, Fe³⁺ in pyroxenes from electron probe anal., 75-2412; extraction from dolerite, 75-350, 3179; oxidation in mafic rock, 75-342; activity in basaltic liquids, 75-3176; ferromagnesian silicates and oxides, 75-3142 (I.6); distribution in carbonate cements and rocks, 75-2261; source in oceanic iron-formations, 75-2223; in pegmatites, 75-2758; XRF detn. in phosphate rock, 75-1782; in minerals in metapelites, 75-654; in carbonaceous and ordinary chondrites, 75-431; oxidation state in lunar basalt, 75-423; ions on Kieselguhr G, 75-1795; *Italy*, abundance in volcanic rocks, 75-2252; distribution in sediments, 75-2269; in ultramafic rocks, 75-1441; *Czechoslovakia*, in sphalerites, 75-2489; *Burma*, in jadeite, 75-1300; *Colorado*, minerals in granitic rocks, 75-2628
 — formations, metamorphism and mineral assemblages, 75-2680, 2693; Precambrian, genesis and atmospheric oxygen, 75-2222; source of iron, 75-2273; depositional environments, 75-2224; banded, palaeoecological significance, 75-2225; *South Africa*, Precambrian, 75-2220; *Minnesota*, contact metamorphism, 75-2687; geol. and stable isotopes, 75-2221; *Quebec*, facies types and environment, 75-3091
 — minerals and compounds, origin, and thermodynamic data, 75-251; lunar Fe-Ni, energy dispersive analysis, 75-775; Fe-FeS eutectic, 75-3208; microchem. detn. of FeO, 75-32; oxide removal from clays, 75-2920; oxide formation in soils, 75-2943; Fe₂O₃ reduction kinetics, 75-2098; Fe-Ti oxides in igneous and metamorphic rocks, 75-2469; hydroxides, solubility products, 75-2927; amorphous hydrated ferric oxide, water interaction, 75-266; Fe(III) hydroxide and formation of hematite, 75-3190; stability of Fe hydrous oxide coatings on montmorillonite, 75-2931; silicate liquids under reducing conditions, 75-1011; lunar silicates, 75-1240; Fe₂-SiO₄, spinel polymorph, crystal structure, 75-276; hydrolysed Fe (ClO₄)₃ solns., 75-267; hydrated sulphates, structure and chem., 75-175; ferric sulphate structure, 75-893; *Czechoslovakia*, Fe-arsenides, 75-2503; *Poland*, Fe-Ti oxides in andesite, 75-2470; in primary kaolins, 75-2950; oxides from gabbros, 75-341; *India*, oxide & hydroxides in charnockites, 75-668; *Colorado*, oxides in stream sediments, 75-2270; *China*, Fe-Ti oxides from layered basic-ultrabasic intrusives, 75-515; *Virginia*, iron sulphide mines, 75-959; *Great Lakes*, iron phosphates in lake sediments, 75-1376; *Canada*, in lake sediments, 75-1172
 — oolites, microstructure and microchem., 75-1963
 — ores and deposits, consignment sampling, 75-62; Precambrian formations, 75-1969; biological origin, 75-1970; banded, ages, 75-1721; country rock zoning, 75-923; detn. of CaO, MgO, Mn, Cu, Zn, Al₂O₃ by AAS, 75-1758; detn. of Ti, V, Ni, Cr, Pb, Bi by AAS, 75-1760; *Britain*, future use, 75-197; *Germany*, limonitic and sideritic, 75-936; *USSR*, Precambrian banded formations, 75-201; vein minerals, 75-228; *Russian SFSR*, Au content, 75-3338; *Egypt*, DTA and gravimetric analysis, 75-974; *India*, origin, 75-2029; clay dykes in, 75-2666; reflection characteristics, 75-516; *Australia*, Precambrian, 75-2012; *USA*, Precambrian, 75-2014; *Wyoming*, taconite ore, 75-1437; *Canadian Shield*, Archaean formations and tectonic basins, 75-2013; *Greenland*, in early Precambrian, 75-2040; age detn., 75-1719; *South America*, 75-2015; *Surinam*, lateritic, 75-232
 Ironstones, *France*, 75-3103; *Russian SFSR*, cyclic bedding, 75-3791; *Nigeria*, origin, 75-3086; *Gulf of Mexico*, deep-sea deposits, 75-2226
 Ishikawa Pref. v. *Japan*
 Island arcs and continental margins, 75-2903 [8]
 Islay, *Argyllshire v. Scotland*
 Isle Royale, *Michigan v. USA*
 Isograds, *Switzerland*, metamorphosed Mesozoic sediments, 75-661
 Isoprenoids, *Costa Rica*, in seep oil, 75-407
 Isostatism, and isostasy, 75-1812
 ISRAEL, Eilat-stone, 75-1102; ammonium in soils, 75-1829; *Bardawil Lagoon*, chem. of interstitial water, 75-3405; *Galilee*, quartz in soils, 75-1857; *Galilee & Menashe*, weathering of basalts, 75-1856; *Golan Heights*, palagonitic material, 75-838; *Gulf of Elat-Gulf of Suez*, intrusive carbonate rocks, 75-2606; *Hazeva formation* sediments, dating, 75-1715; *Mediterranean coast*, surface microtextures of heavy minerals, 75-2663; *Mt. Carmel*, *el-Tabun cave*, phosphate mineralogy, 75-3894; *Ranim*, iron oolites, 75-1963; *Sinai*, water sources, 75-1200; albitite-carbonatite complex, 75-2605
 Itabirite, *Surinam*, anal., 75-232
 ITALY, dolomite-calcite in marble, 75-1374; zircon in igneous and metamorphic rocks, 75-1287; *Acciglio*, nappes, 75-3630; *Alpe di Siusi*, Na-rich dachardite, 75-2462; *Alps* and *Apennines*, isotopes in spring and stream water sulphate, 75-1205; *Apennines*, superferric eclogites of Voltri group, 75-2701; ultramafic rocks, 75-1441; interlayer illite-montmorillonite in clays, 75-1848; Ti, Al, Fe distribution in sediments, 75-2269; *Argentina*, thermoluminescence of quartz veins, 75-1648; andalusite and sillimanite at gneiss-granite contact, 75-1606; *Bergell Alps*, metamorphism of antigorite schist, 75-2700; aplite veins and pegmatites, 75-3878; *Bologna*, gypsum, structure refinement, 75-174; *Calabria*, geosstructural model, 75-2547; potassic white micas in metapelites, 75-2425; meta-ophiolites, 75-3832; *Cima d'Asta*, nature of granites, 75-2601; *Dolomites*, glassy inclusions in quartz, 75-1333; *Fiesole-Pian del Mugnone*, serpentine minerals, 75-2440; *Fornazzo*, lava comparison with Etna, 75-2635; *Forno*, Triassic volcanic rocks, geochem., 75-2252; *Golfi di Taranto*, minerals in sand, 75-1545; *Gran Paradiso*, eclogites, 75-1608; *Gran Sasso massif*, sedimentary rock, 75-3787; *Ivrea*, velocity anisotropy in mantle peridotite, 75-699; *Lago d'Orta*, chlorite from granite, 75-2437; *Lanzo*, peridotites, 75-1412; *Liguria*, native Ni-Fe and nickel sulphides, 75-1360; ophiolites, mineralization, 75-933; ophiolitic metabasic rocks, 75-386; *Livorno*, distribution of cinnabar, 75-926; *Marmolada group*, stratigraphy, 75-3631; *Montecristo I.*, K-feldspars, 75-2445; *Mt. Baldo & Mt. Brione*, glauconite-celadonite, 75-2434; *Mt. Lucno*, petrog., 75-3719; *Novate*, anisotropies in granites, 75-1469; *Ossola*, kasolite and monazite, 75-1674; *Pre-dazzo*, lithium mica, 75-2427; monzonitic rocks, 75-2564; ultramafic inclusions in volcanic rocks, 75-2565; clinopyroxene inclusions in Triassic rocks, 75-1442; deweylite (chrysotile), 75-3498; *Rome*, volcanic base surge deposits, 75-372; phillipsite structure, 75-1913; *Tuscany*, sphalerite, 75-1361; *Val Malenco*, andradites, 75-1290; *Val Martello*, garnets from pegmatites, 75-1292; *Vesuvius*, leucite in lava, 75-3300; *Vesuvius & Monte Somma*, aluminous clinopyroxenes, 75-2416; *Vulcano I.*, alunogen, 75-3062
 — ELBA, mineral localities, 75-1675, 1676; syneusis of plagioclase with K-

ITALY (contd.)

- feldspar, 75-1337; basic-ultrabasic layered extrusion, 75-338
- , SARDINIA, fluid inclusions in fluorite, 75-999; zeolites, 75-1344; Sr isotopes in andesites and associated lavas, 75-1158; ages of intrusive rocks, 75-1709; metamorphic complex, 75-2702; Hercynian granitic rocks, 75-2546; minor element variation in granite, 75-3344; *Bono*, amphibolite, 75-2703; *Bono* and *Anela*, contact metamorphic effects, 75-2682; *Calabona*, copper ore deposit, 75-968; *Capo Pula*, sodian stellerite, 75-2463; *Montiferro*, phonolitic trachyte, 75-1493; volcanic alkaline series, 75-1494, 1495; latite-basaltic and alkali-basaltic outcrops, 75-1496; *Orotelli-Bolotana-Bultei*, granodioritic and quartz dioritic rocks, 75-2566; *Rosas*, brochantite, 75-2508; *Sinis*, pyroxene latite-andesite, 75-1492
- , SICILY, *Aeolian Is.*, microtremors and explosions at *Stromboli*, 75-3724; gravity survey, 75-3725; *Linosa*, petrol. of volcanic island, 75-3723; *Mt. Etna*, cinder cone growth, 75-2634; zoning in calcic augites, 75-1299; 1971 lava, petrochem., 75-2635; petrochemical variations, 75-2250; andesitic eruptions, 75-3721; recent lavas, 75-3722; *Palermo*, Mn ore in dolomite limestone breccias, 75-1987; *Piazza Armerina*, volcanoclastic rocks, 75-2636
- Itinome-gata v. Japan*
Ivory, walrus, opt., 75-3321
- IVORY COAST, east African craton, 75-3640; age of granites, 75-2817
- Ivrea v. Italy*
Iwanai v. Japan
Iwate Pref v. Japan
Ixolite, *Mozambique*, scandian, chem., anal., X-ray, 75-520
- Jade, effect of gamma rays, 75-1056
- Jadeite v. pyroxene
- Jahnsite, *S. Dakota*, crystal structure, 75-895
- Jahn-Teller effects, in pyroxenes and olivines, 75-3142 (II.3)
- Jambughoda v. India*
Jan Mayen I. v. Atlantic Ocean
- JAPAN, ancient continental margin, 75-2903 [61]; Pb isotopes in pegmatitic feldspars, 75-318; in black ore deposits, 75-1141; alkali feldspars in plutonic rocks, 75-492; manganese in acid clay, 75-1818; kaolinite transformation, 75-1870; dehydration of allophane, 75-1353; allophane soils, 75-2973; pyroclastic breccias, 75-2632; *Donzurubo*, pyroclastic flow deposits, 75-3734; *Higasiakatsi*, eclogites, 75-2745; *Horobetsu mine*, horobetsuite, 75-531, 532, 533; *Itinome-gata*, Cr-spinels in ilherzolite inclusions, 75-514; *Kosaka* and *Tsuchi-hata*, acid volcanic rocks and kuroko deposits, 75-584; *Kishu mine*, intermediate pyrrhotite, 75-3033; *Kuroko* deposits, mineralogy, 75-1999; *Nagoya*, kaolin minerals in clays, 75-126; *Nansei-Syoto Is.*, clay minerals in Recent marine sediments, 75-1867; *Sanbagawa*, zoned epidote, 75-457; *Takato-Shiojiri*, graphite from metamorphic rocks, 75-671; *east Tanzawa Mts.*, mordenite in zeolite facies rocks, 75-650; *Tokyo*, clay mineralogy of Kanto loam, 75-132; AICHI PREF., *Mikawa*, clay minerals in Hekkai formation, 75-130; AKITA PREF.,

- Arakawa mine*, veszelyite, structure determination, 75-180; *Agenosawa mine*, bismuthinite, cosalite, 75-530; *Akita oil fields*, clay minerals & organic matter in carbonate rocks, 75-123; *Nibetsu*, Fe-saponite and chlorite in pillow lava, 75-1863; *Niida*, clay minerals in core samples, 75-1869; *Shakanai mine*, mica clay mineral, 75-1865; mineralogy of core, 75-1868; *Yamamoto-gun*, clinoptilolite, 75-505; FUKUOKA PREF., bentonite, 75-129; FUKUSHIMA PREF., *Kawamata* pegmatite, lepidomelane, 75-3265; GUMMA PREF. *Tokura*, interstratified clay mineral, 75-124; HIROSHIMA PREF., *Onino-Iwaya cave*, taranakite, 75-3585; HOKKAIDO PREF., *Abuta mine*, bismuthinite, 75-533; *Iwanai*, laumontite-tuff, 75-503; *Hidaka Mts.*, actinolite-hornblende in gabbros, 75-2422; *Horomi Pass*, weathering of volcanic eruptives, 75-127; *Teine mine*, bismuthinite, 75-532, 533; HONSHU PREF., *Fujigatani mine*, stilpnomelane, 75-3508; *Kitakami Mts.*, plagioclases in granitic rocks, 75-496; pyrite in Toyoma formation, 75-522; chlorite and vermiculite in red shale, 75-1862; HYOGO PREF., *Ebara*, interstratified mineral, thermal behaviour, 75-1840; IBARAGI PREF., *Hase mine*, interstratified biotite and vermiculite, 75-93; ISHIKAWA PREF., *Yamanaka*, chlorite clay minerals in sandstone, 75-1864; IWATE PREF., *Senmeya*, vermiculite weathered from biotite, 75-94; KAGOSHIMA PREF., *Kagowara*, mica and montmorillonite in altered tuff, 75-1866; *Koriyama* zeolite rock, 75-649; montmorillonitization of opal druse in andesite, 75-121; KUMAMOTO PREF., geochem of ash soil, 75-128; MIYAGI PREF., *Kawatabi*, serpentinite, 75-670; *Shiroishi*, mordenitic tuff, 75-302; NAGANO PREF., *Kiso*, clay minerals of podzolic soils, 75-122; OSAKA PREF., clay minerals and genetic environment, 75-131; *Ibaragi* granitic complex, RE distribution, 75-327; SHIKOKU; quartz xenocrysts in andesite and basalt, 75-3704; *Bessi*, 3T muscovite polytype, 75-3493; *Sazare*, garnets in pelitic schists, 75-443; metamorphism of pelitic schists, 75-1635; chlorites in *Sanbagawa* schists, 75-483; SHIMANE PREF., *Nima-Yunotsu*, zeolitic zoning in pyroclastic rocks, 75-502; TOGICHI PREF., *Kuzuu*, sepiolite, 75-1839; *Nikko*, zeolites, 75-651; YAMAGATA PREF., *Itaya*, cation adsorption of zeolite rock, 75-29; YAMAGUCHI PREF., serpentine minerals, 75-485; *Obari* and *Naganobori mines*, wittichenite, 75-531
- JAPAN SEA, clay minerals in Recent sediments, 75-1575
- Jarosite, solubility product, 75-2927; *Germany*, on pyrite or marcasite in trachytic tuffs, 75-834; *Colorado*, 75-223, 2766
- Jasper, *Russian SFSR*, garnet-bearing, 75-1099
- Jeremejevite, gemstone, 75-1105
- Jerome, Arizona v. USA*
- Jhingran, Prof. A. G., biography, 75-1812
- Jordanite, structure detn., 75-856; *Switzerland*, crystal structure, 75-887
- Joseite A, *Japan*, anal., 75-530
- Juan de Fuca Ridge v. Pacific Ocean*
- Jugoslavia v. Yugoslavia*
- Julgoldite, crystal chem. and nomenclature, 75-3464
- JUPITER, early evolution, 75-2781; *Io*, sur-

face evaporite deposit, 75-2779; surface composition, 75-2780

- Kaczawskie Mts. v. Poland*
Kaersutite, Greenland, in gabbroic inclusions, 75-3681
- Kagoshima Pref. v. Japan*
Kainite, Dead Sea, 75-2053
- Kalicine, synthetic, crystal structure, 75-1941
- Kalskaret v. Norway*
- Kambalda, WA v. Australia*
Kamchatka, Russian SFSR v. USSR
Kammererite, India, from chromite deposits, 75-484
- Kansas v. USA*
- Kaolin, heat treatment, 75-1065; interlayer bonding in kaolin-type structures, 75-156; *Bavaria*, deposits, 75-835; *Poland*, 75-836; iron minerals in, 75-2950; statistical analysis of occurrences, 75-196; *Queensland*, deposit, 75-840; *Georgia*, sedimentary, particle size-shape relationships, 75-1000
- Kaolinite, synthesis at 25°C, 75-296; thermal expansion, 75-2730; consolidated, fabric, 75-2939; decomposition, 75-3159; transformations and volatile pressures, 75-2159; high PT transformation, 75-2143; stability diagram, 75-802; one-layer polytypism, 75-1904; pore structure of homoionic sediments, 75-3857; directional crystal imperfections, 75-103; mineralogy, deposits, uses, 75-1845; dehydroxylation kinetics, 75-1836; Fe-containing impurities, Mössbauer study, 75-1816; hydrothermal dissociation, heating under pressure, 75-1066; differential thermal calorimetry, 75-3278, 3279; DTA and endothermic effect, 75-86; stationary phase in gas-solid chromatography, 75-823; kaolinite-mullite reaction, 75-2160; transformation to mullite and cristobalite, 75-297; effect of grinding with KBr, 75-2938; K-feldspars as aid to precipitation, 75-2937; oceanic distribution, 75-1551; effect of Al on surface properties, 75-102; *France*, formation of bauxite from, 75-2960; *Poland*, anal., 75-2967; interstratified with smectite, 75-85, 1833; in epigenetic formation, 75-641; formation during alteration of Carboniferous tuff, 75-2957; *USSR*, distribution in Carboniferous coal measures, 75-119; in Jurassic deposits, thermal analysis, 75-2964; *Sudan*, in sandstone, 75-1854; *Nigeria*, in sandstone-derived soils, 75-2965; *Japan*, weathering and diagenesis, 75-1870; in Pliocene clay deposits, 75-126; *New South Wales*, clay-rocks, 75-1873; *California*, chromiferous, chem., X-ray, 75-88
- Kaolinitic rocks, *Poland*, mineralogy, petrology, 75-2966
- Kara Kum, Turkmenistan v. USSR*
Karatau, Kazakhstan v. USSR
Karelia, Russian SFSR v. USSR
Karibib v. SW Africa
Karnes Co., Texas v. USA
- Karst, mineralization, 75-919; *Crimean Mts.*, caves containing neogenic gypsum, 75-535
- Kasolite, *Italy*, in pegmatite, 75-1674
- Kataphorite v. amphibole
- Kazakhovite, *Russian SFSR*, new mineral, anal., opt., X-ray, 75-1392
- Kazakhstan v. USSR*
- Keatite, formed in kaolinite transformation, 75-2143
- Keewatin, NWT v. Canada*

- ite, crystal structure, 75-3030
 v. *North Carolina*, new mineral, X-ray, 75-2523
 IYA, idocrase, 75-1295; oligoclase, 75-513; *Archer's Post*, pink muscovite, 75-426; *Eburru volcano*, rock sample study, 75-3732; *Kwale*, chrome-diopside, 75-090; *Lr. Umba R. valley*, blue gem garnet, 75-2185; *Lualenyi*, vanadian grossular, 75-3313; *Machakos*, colourless oligoclase, 75-1327; *Narok*, red tourmalines, 75-1096; *Tiati*, phonolitic ash-flow tuffs, 75-1499
 atophyes, and spilites, 75-2599; *Antarctica*, 75-613
 ch pen., *Russian SFSR v. USSR*
 ogen, microscopic examination, 75-2668; naturally and artificially metamorphosed, 75-369
 ry v. *Ireland*
 sanites, *Czechoslovakia*, 75-591
 terite, phase-relations, 75-2109; *New Brunswick*, 75-3559
 binskite, *Russian SFSR*, new mineral, opt., X-ray, 75-556
 serite, *Dead Sea*, 75-2053
 tuchi lines, in high-energy electron diffraction, 75-2995
 uea, *Hawaii v. USA*
 ula, *Sligo v. Ireland*
 nberlite, reaction with diamond, 75-1006; synthesis of diamond in magma, 75-1466; U content, 75-2255; peridotite xenoliths in, 75-679; kimberlitic assemblages, 75-3170; *Norway*, garnet lherzolite equilibration temperatures, 75-2590; *Russian SFSR*, mineral inclusions in olivine, 75-437; Cr and Ti in garnets from, 75-446; Cr-rich clinopyroxenes from, 75-3474; graphite-bearing pyrope peridotite, 75-2256; *Siberia*, ultramafic inclusions, 75-594; *South Africa*, phlogopites and potassic richterites from, 75-2430; pyroxenite nodules from, 75-2611; classification parameters, 75-2612; ten newly discovered pipes, 75-2613; *Kansas*, containing xenoliths of upper mantle and crustal rocks, 75-2629
 ngite, kaolinite-type-structure, 75-182
 noshitalite, new brittle mica, anal., 75-476, 3598
 takami Mts., *Honshu v. Japan*
 v. *Finland*
 nberlite v. olivine
 norringite v. garnet
 oshvite, *Russian SFSR*, new mineral, anal., opt., X-ray, 75-2524
 ochlinite, first *USSR* find, anal., 75-542
 ola pen., *Russian SFSR v. USSR*
 omatiites, petrogenesis, 75-3679; *India*, basaltic, 75-1423; *India*, in Precambrian, 75-597
 OREA, demantoid, 75-3311; galena, 75-2737; sepiolite, 75-1839; metallic deposits, geotectonic movements, 75-951; *Dalsung mine*, homogenization temps. and paragenesis, 75-979; *Janggun mine*, Mn deposits, 75-978; *Kyeongnam copper* metallogenic province, 75-216; *Kyonggal* metamorphic complex, stratigraphy and structure, 75-571; *Kyongsangpuk-Do*, sepiolite, 75-125; *Wolaksan and Chungcheonbuk-Do*, *Cheonil mine*, fluorite deposits, 75-238
 ornerupine, gem discovery, 75-311; *Tanzania*, opt., 75-1296; *Greenland*, in anorthosite complex, 75-3611
 orsnäs v. *Finland*
 ovdor, *Russian SFSR v. USSR*
 raustite, isotypic, 75-1924
 Krinovite, crystal structure, 75-875, 1899; order-disorder, 75-150
 Krivoy Rog, *Ukrainian SSR v. USSR*
 Kröhnkite, *Western Australia*, 75-3886
 Krupkaite, crystal structure, 75-3038; *Czechoslovakia*, chem. opt., X-ray, 75-3599; *Australia*, crystal structure, anal., 75-3039
 Kryzhanovskite, *South Dakota*, with meta-vivianite, 75-1393
 Kumamoto Pref. v. *Japan*
 Kumaun Himalaya v. *India*
 Kunzite, effect of gamma rays, 75-1056
 Kurile Is., *Russian SFSR v. USSR*
 Kurnakovite, structure refinement, 75-1927
 Kuroko deposits, *Japan*, formation, 75-584
 Küstelite, *USSR*, from Au-Ag ores, 75-3562
 Kutch, *Gulf of v. India*
 Kutná Hora v. *Czechoslovakia*
 Kyanite, transformation from staurolite, 75-143; synthetic Mn^{3+} , 75-2142; in amphibolite-facies schists and gneisses, 75-451; *Cornwall*, in rocks of *Land's End aureole*, 75-1597; *France*, in metamorphic rocks, 75-1605; *Switzerland*, 75-1617; *Florida*, micro-textures with SEM, 75-2671; *Georgia*, 75-310; in sediments, 75-2672
 Kyzyl Kum v. *USSR*
 Labrador v. *Canada*
 Labradorite v. feldspar
 Labuntsovite, crystal structure, 75-152
 Laffittite, new mineral, *France*, anal., opt., X-ray, 75-1395
 Lairg, *Sutherland v. Scotland*
 Lake Balkhash, *Kazakhstan v. USSR*
 Lake Manyara v. *Tanzania*
 Lamprophyres, *Ireland*, swarm, 75-577; *Channel Is.* petrochem., 75-3357; *Portugal*, with biotite and actinolite, 75-2562; *Algeria*, 75-3666; *India*, 75-582
 Lander Co., *Nevada v. USA*
 Långban v. *Sweden*
 Lanthanide elements in fluorite, 75-2214
 Lapis-lazuli, *Afghanistan*, anal., 75-3316
 Laplandite, *Russian SFSR*, new mineral, anal., opt., X-ray, 75-2525
 Laramie Range, *Wyoming v. USA*
 Larnite, synthesis, 75-1060
 Laser beams, action on volcanic rocks, 75-256; microspectral analysis of ores, 75-218
 — microanalysis, quantitative analysis, 75-2895; *USSR*, classification of pyrite, 75-1355
 Lassiter Coast v. *Antarctica*
 Laterite, formation, 75-1179; spectrophotometric detn. of Co, 75-2874; nickeliferous, 75-1962; *Angola*, 75-1992; *Surinam*, 75-232
 Latite-basalts, *Sardinia*, 75-1496
 Lattice complexes, 75-857, 858
 Lau Basin v. *Pacific Ocean*
 Laueite, polymorph of stewartite, 75-1945; combinatorial polymorphism, 75-3056
 Laumontite v. zeolite
 Lautite, *Germany*, 75-2755
 Lava, dynamic mixing with water, 75-1502; alkalic-basaltic, amphibole in inclusions, 75-1463; *Mr. Etna*, 1971 eruption, 75-2635; *India*, feldspars and direction of flow, 75-2621; *Newfoundland*, plateau lavas, 75-2627
 Lavendulan, *South Australia*, phosphorian, anal., 75-1380
 Låvenite, *Russian SFSR*, varieties in nepheline syenite, anal., opt., X-ray, 75-460
 Lawsonite, transformation from epidote, 75-456; *California*, infrared pleochroism, 75-151
 Layered intrusions, phase equilibria at chilled margins, 75-255
 Lazulite, structure related to trolleite, 75-894; *Austria*, occurrences, 75-2757; *USA*, *Georgia*, 75-310
 Lazurite, cutting and polishing, 75-21
 Lead, detn. in iron ore by AAS, 75-1760; sorption by algal matter, 75-1203; AAS detn. in carbonate rocks, 75-42; *Germany*, in Trochitenkalk, 75-202; *Black Sea*, in Holocene sediments, 75-365; *SW Africa*, windborne, effect on geochem. reconnaissance, 75-1231; *Canada*, geochem., 75-2323
 — deposits, quartz in Pb-Zn lodes, 75-3075; detn. of Ag in concentrates, 75-2882; *Wales*, Pb-Zn veins, textures, paragenesis and zoning, 75-932; *Germany*, Pb-Zn deposits, 75-934; *Poland*, Pb-Zn mineralization, 75-940; chalcophanite from, 75-2480; *USSR*, 75-213; *India*, containing diagenetic pyrite, 75-2028; *Australia*, S isotope ratios, 75-1143; *Virginia*, abandoned mines, 75-958; *N-W Territories*, trace metal dispersion, 75-414; *Guatemala*, Pb-Zn mineralization, 75-3095
 — isotopes, in biotites, ion probe confirmation, 75-1126; *Ukrainian SSR*, in ore deposits, 75-3341; *Japan*, in alkali feldspars, 75-318; in black ore deposits, 75-1141; *Queensland*, in igneous rocks and ore Pb, 75-1717; *N-W Territories*, ratios from gneisses and intruding granites, 75-16
 — minerals and compounds, PbO, water induced transformation, 75-3201; orthorhombic PbO, thermal expansion, 75-3858; tetragonal PbO, 75-3859; lead iodide, structural transformations, 75-1951; Pb₂SiO₄ fusion enthalpy, 75-3245; Pb orthophosphate, formation and stability, 75-274
 Leba v. *Poland*
 Leicestershire v. *England*
 Leinster v. *Ireland*
 Lemoynite, *Quebec*, crystal structure, 75-3006
 Lepidocrocite, *Switzerland*, 75-3104
 Lepidolite v. mica
 Lepidomelane v. mica
 LESOTHO, U in kimberlites, 75-2255
 Lesser Antilles v. *West Indies*
 Lesser Karatan, *Kazakhstan v. USSR*
 Leucite, solid soln. of SiO₂, 75-3142 (IV. 4); Rb- and Sr, thermodynamic props., 75-3301, 3303; solid solutions with pollucite, 75-3302; *Italy*, showing exsolution lamellae, anal., 75-3300; *Uganda*, in lavas, 75-3699
 Leucitic rocks, origin, 75-2579
 Leucodacite, *Nova Scotia*, age detn., 75-739
 Leucogranites, muscovites from, 75-3494
 Leucophosphate, *Western Australia*, 75-3886
 Leucoxene, *USSR*, niobian, 75-212; *Russian SFSR*, mixed rutile-anatase, 75-1350; *USA*, *Georgia*, in sediments, 75-2672
 Levyne v. zeolite
 Lherzolites, spinel and garnet, melting phase relations, 75-2093; *France*, chem., min. variation, 75-3692; *Mediterranean*, in ophiolites, 75-609; *Norway*, equilibration temps. and pressures, 75-2590; *Japan*, Cr spinels in, 75-514; *Indian Ocean*, serpentinized, 75-1523; *Victoria*, inclusions in basanites, 75-1160; *British Columbia*, nodules in basalts, 75-1478
 LIBERIA, monazite, 75-1991
 LIBYA, quartzite sandstone from Cretaceous,

LIBYA (contd.)

- 75-614; *Haruj Asuad*, palaeomagnetism and ages of basalts, 75-730
- Lièvre R., Quebec v. Canada*
- Lignite, *Devon*, ESR study, 75-804; *Hungary*, minor elements, 75-2279
- Liguria v. Italy*
- Lime, detn. in iron ore by AAS, 75-1758; with bentonite, IR spectra, 75-3163; catalyst in synthesis of organic matter, 75-313
- Limestone, detn. of total sulphur, 75-36; stromatolitic, algal origin of dolomite laminations, 75-3577; marine, diagenesis of ooids, 75-3575; *British Isles*, major and trace element associations, 75-3388; *n. England*, palaeomagnetic results, 75-3892; *Durham*, Lt. Magnesian Limestone, baryte mineralization, 75-235; *South Wales*, Lr. Carboniferous palaeoenvironment, 75-379; *Scotland*, lacustrine, 75-3619; *Ireland*, at Tynagh deposit, 75-322; *S. France*, 75-1543; *Spain*, galena and fluorspar deposits, 75-1984; *Sicily*, origin of Mn ore in, 75-1987; *Poland*, as raw material, 75-626; *Czechoslovakia*, 75-1371; *Zaire*, 75-943; *Rhodesia*, age of Huntsman limestone, 75-731; *India*, O and C isotope variations, 75-2268; dolomitisation, 75-632; high phosphorus stromatolitic limestones, 75-360; *Korea*, 75-571; *California*, resources, 75-239; *Kansas*, vertical heavy mineral variation, 75-1591; *Connecticut*, micaceous, metamorphism, 75-3849
- Limonite, *Germany*, in iron ores, 75-936
- Linarite, topotactic transformation to angle-site, 75-143
- Lincoln Co., Texas v. USA*
- Linear programming, evaluating ore deposits, 75-911
- Linnaeite, *Zaire*, 75-975; *India*, intergrowths in Cu sulphides, 75-1996
- Liparite, *Mongolia*, age detn., 75-9
- Lipids, adsorption on clay minerals and sediments, 75-372
- Liss, Hampshire v. England*
- Listwanites, thermodynamics of genesis, 75-2257
- Lithiophorite, topotactic transformation to spinel phase, 75-143
- Lithium, analysis by AAS, 75-41; analysis by flame emission spectrophotometry, 75-772; geochemical indicator, 75-2331; in carbonaceous chondrites, 75-1277; *Peru*, fractionation in calc-alkaline rocks, 75-348
- compounds, lithium carbonate in formation of β -spodumene, 75-2152; system LiF-nepheline-villiamite, 75-252; Li_2NaPO_4 characterization, 75-2126
- Lithosphere, thermal structure, 75-1510; mass balance with hydrosphere and atmosphere, 75-2202
- Little Belt Mts., Montana v. USA*
- Little Cornwallis I., NWT v. Canada*
- Lizardite, in nickel silicates, 75-486; *Japan*, 75-485; *New Caledonia*, from ultramafic belt, 75-477
- Loams, *Poland*, weathered, Lr. Carboniferous, 75-1851
- Loch Leven, Kinross v. Scotland*
- Loch Loyal, Sutherland v. Scotland*
- Loch Shin, Sutherland v. Scotland*
- Löllingite, *Germany*, 75-2755; *Czechoslovakia*, 75-2503; *California*, 75-1294
- Lonsdaleite, in impactites, XRD study, 75-3530
- Loparite, geothermometer, 75-2330

- Loss-on-ignition, estimation of soil organic matter, 75-2925
- Lower Silesia v. Poland*
- Lublin v. Poland*
- Ludlamite, *Germany*, 75-2756
- Ludwigite, related to vonsenite, 75-1381
- Lunar studies, differentiation, 75-418; exploration, 75-1235; terminal lunar cataclysm, 75-2357
- age detn., Apollo 15, chronology and cosmic ray exposure ages, 75-1245; Apollo 17 station 7 boulder 7, 75-3429, 3430; Apollo 17 basalt and gabbro, 75-1246
- atmosphere, 75-2355
- chemistry, analysis of chromium, 75-1257; melting and differentiation, 75-2350; Apollo 15 rocks and regoliths, 75-1234; Apollo 16, light element geochem., 75-2349; Apollo 17, major, minor & trace elements, 75-3427
- craters, morphology, 75-2365; flows of impact melt, 75-3422; depth of Orbiter IV photographs, 75-2367
- crust, heterogeneous accretion, 75-420
- fines, carbon, nitrogen and sulphur content, 75-422; fading of thermoluminescence, 75-1255; remanent magnetisation, 75-2360; ferromagnetic resonance spectra, 75-1248
- glasses, deposits of pyroclastic origin, 75-1236; Apollo 11 spherules, vaporization and condensation on, 75-2348; in regolith at Apollo 15 site, 75-1247; *Fra Mauro*, sintering and hot pressing, 75-3423
- interior, seismic data, 75-2353
- lavas, Apollo 12 site, phase equilibria, 75-1250
- magnetic anomalies, 75-1256
- mineralogy, carbide formed from iron silicates, 75-1240; noritic fragments and diopside veins, 75-1243; plagioclase, phase transformations and exsolution, 75-2344; pigeonite, antiphase domains, 75-1894; structure refinement, 75-866; bronzite from deep crustal rock, 75-2343; spinels and ilmenite in Apollo 15 rake samples, 75-2342; Apollo 17, station 7 boulder, 75-3428; ortho and para-armalcolite in Apollo 17, 75-1239
- rilles, role of lava erosion, 75-2793
- rocks, age of breccias, 75-1237; age of igneous rocks, 75-1244; breccia with chondritic texture, 75-1249; rusty, water & carbon in, 75-1253; inclusions in globules, 75-2356; regolith, average depth, 75-3425; thickness, Monte Carlo calculations, 75-1251; highland pyroxenes, 75-2147; ferrobasalts, oxygen fugacity, 75-2082; basalts, plagioclase crystallization, 75-2169; feldspathic basalts, 75-2346; pyroxene-phyric basalts, 75-2345; deep crustal troctolitic granulite, 75-1254, 2343; specimen slicing method, 75-2849; breccia lithification, 75-3423; sample 77135, 75-3431; lithic fragments from Apollo 12 coarse fines, 75-3424; clast groups in Apollo 14 & 15 breccias, 75-2347; regolith at Apollo 15 site, 75-1247; rocks and regoliths, 75-1234; Apollo 17 rocks, micro crater populations, 75-2366; dissection and consortium allocation, 75-3426
- soils, development, 75-2369; major and trace elements, 75-51; accumulation of carbon, 75-2352; history of Apollo 17 soils, 75-1238; *Shorty crater*, orange, meteorite impact origin, 75-1241, 1242
- surface, radiative transfer, 75-3435;

- cosmic-ray exposure history of Apollo 16 site, 75-1237; v. also MOON
- Lushs Bight, Newfoundland v. Canada*
- Luzonite, DTA, 75-532; *Sardinia*, 75-968; *Greece*, 75-2022; *Taiwan*, luzonite-famatinite, Sb contents, 75-2499
- Lyons, Kansas v. USA*
- Lysocline, kinetic origin, 75-3227

- Maars, formation, 75-3716
- McArthur R., NT v. Australia*
- Mackenzie, NWT v. Canada*
- Mackinawite, New Zealand*, in hot spring deposit, anal., 75-2488
- Mckinstryite, Norway*, in polymetallic sulphide deposit, opt., 75-2501
- Macquarie I., v. Southern Ocean*
- Madagascar v. Malagasy Republic*
- Madhya Pradesh v. India*
- Madison Co., North Carolina v. USA*
- Madoc, Ontario v. Canada*
- Mafic rocks, oxidation of iron in, 75-342; spectroscopic detn. of V, 75-1762; *Alps*, metamorphism, 75-1610; *Austrian Alps*, oceanic, 75-3766; *Atlantic Ocean*, gold content, 75-343; *Canary Is.*, clinopyroxene geobarometer 75-2414; *South Africa* in terms of CMAS system, 75-2615; *Indian Ocean*, extrusive and intrusive, 75-2649; *Newfoundland*, Late Jurassic pluton, 75-1480
- Magadiite, *Oregon*, source of chert, 75-1588
- Maghemite, oxygen K absorption spectra, 75-2986
- Magma, solubility of sulphur, 75-254; molten, inclusions in quartz, 75-332; meteoric water in, 75-402; basic and ultrabasic, water solubility, 75-1015; thermal convection systems, 75-560; *African rift*, origin and differentiation, 75-596; *China*, isotopic rock ages, 75-15; *Lesser Antilles*, strong by undersaturated, 75-1519; *California*, high-alumina, water content, 75-3746; *Nova Scotia*, coexisting basaltic and granitic, 75-3355
- Magmatism, review, 75-2574; origin of Benioff zone, 75-607; *Australia*, events related to Cretaceous transgressions, 75-1426
- Magnesia, detn. in iron ore by AAS, 75-1758
- Magnesianiebeckite v. amphibole*
- Magnesiowüstites*, magnetization curves, 75-2099; oxygen fugacity calibrant, 75-2101
- Magnesite, subsolidus and melting relationships, 75-2117; EDTA dissolution, 75-2889; *Shetlands*, 75-2068; *Czechoslovakia*, in Gelnicka group, anal., 75-1371
- Magnesium, distribution in carbonate cements and rocks, 75-2261; uptake by corals from sea-water, 75-3383; in coexisting metamorphic calcite and dolomite, 75-384; in coexisting garnet and clinopyroxene solid soln., 75-2399; in carbonaceous & ordinary chondrites, 75-431; *Italy*, in ultramafic rocks, 75-1441; abundance in volcanic rocks, 75-2252
- compounds, MgO, low-energy electron diffractometry, 75-165; Debye-Waller factors, 75-166; Kikuchi lines, 75-2995; $\text{MgO-H}_2\text{O}$ phase equilibrium, 75-3198; $\text{MgO-Al}_2\text{O}_3$ powders, defect structure and phys. props., 75-1026; $\text{MgO} \cdot 2\text{MgCO}_3$, decomposition product of nesquehite, 75-3232; magnesium carbonate rocks, brucite in, 75-656; magnesium diammonium hydrogen orthophosphate tetrahydrate structure, 75-177

- netic anisotropy, of Eu-Fe garnet, 75-2726
- anomalies, lunar, 75-1256
- fields, effect on reduction of hematite, 75-1139; accelerated reaction rates, 75-1140
- minerals, wet magnetic separation, 75-748
- properties, Fe in Fe-Ni-S system, 75-886; of oceanic basalts, 75-1661; minerals in Iceland basalt, 75-2742; Mid-Atlantic Ridge, 75-695; Greece, in biotites, 75-687; Poland, anorthosite, 75-693; Macquarie I., exposed oceanic crust, 75-1662
- surveys, Ireland, 75-3870, 3871
- susceptibility, Italy/Switzerland, Bergell massif, 75-3878
- metism, planetary, 75-2748
- metite, phase relations, 75-2122; isothermal compression and phase transformation, 75-262; deformation of crystals, 75-3183; synthetic $\text{Fe}_3\text{O}_4\cdot\gamma\text{Fe}_2\text{O}_3$, vacancy distribution, 75-880; photometric detn. of V, 75-1761; role in eclogitic assemblages, 75-1007; segregation from sands, 75-1019; Scotland, chem. and economic aspects, 75-1980; Rockall, Cr-rich, 75-2397; Helen's Reef, 75-2538; Norway, 75-561; Sweden, cubic habit, 75-2471; Ni-bearing, X-ray, 75-2472; Finland, coexisting with ilmenite, 75-3539; Czechoslovakia, opt., X-ray, 75-2475; in skarn deposit, anal., 75-2020; Poland, anal., 75-3540; USSR, 75-205; Russian SFSR, dissociation textures, 75-3541; pigment in black jasper, 75-1099; Israel, surface texture by SEM, 75-2663; Yemen and Aden, 75-1349; India reflectivity & VHN, 75-516; from ultrabasic rocks, 75-2473; China, titaniferous, 75-515; New South Wales, 75-3554; Queensland, 75-980; Western Australia, titaniferous, containing pseudorutile, 75-3886; USA, Georgia, in sediments, 75-2672; Kansas, 75-1591; Pennsylvania, deposit, geol. and origin, 75-2043; Washington, anal., 75-517; Canada, 75-221; Greenland, trace elements, 75-1161; Venezuela, in gneisses, 75-675
- zine v. USA
- alachite, cutting & polishing, 75-21; Cu²⁺ optical absorption spectra, 75-3050; topotactic transformation to tenorite, 75-143; Switzerland, 75-3104; Australia, 75-952; South Australia, 75-2037
- ilaga v. Spain
- ALAGASY REPUBLIC, moonstones, 75-1106; celestine, 75-1109; artificial alteration of biotite, 75-818; pegmatitic granodiorite, 75-2025; Ambatofinandrahana, pegmatitic granodiorite, 75-1445; Andrarony and Manambato group, age detn., 75-2820; Margaritra, Li-beryl, crystal structure, 75-861
- alanite, China, new mineral, anal., opt., X-ray, 75-2522
- ALAWI, gravity survey, 75-2552; N, structural and metamorphic geol., 75-663
- ALAYSIA, geology, bibliog. and index, 75-1805; and SE Asia, continental drift, 75-2775; Sabah, garnet pyroxenites, 75-2715
- manganese, XRF detn. in ilmenite, 75-1783; detn. in iron ore by AAS, 75-1758; Mn²⁺ in forsterite, 75-1886; in absorption spectrum of rhodochrosite, 75-1372; ESR spectra in smectites, 75-1819; ions on Kieselguhr G, 75-1795; in carbonate concretions, 75-2263; in coexisting pyroxenes, 75-1304; Italy, in ultramafic rocks, 75-1441; abundance in volcanic rocks, 75-2252; Czechoslovakia, in sphalerite, 75-2489; Russian SFSR, in evaporite beds, 75-2026; Japan, in acid clay, 75-1818; Pacific Ocean, in sediment interstitial water, 75-3406; Arizona, in coexisting mafic minerals, 75-2423
- compounds, manganese dioxide-solution interface reactions, 75-3189; Colorado, Mn oxides in stream sediments, 75-2270
- concretions, Pacific Ocean, in deep-sea sediments, 75-2259
- deposits, freshwater accretion-rates, 75-1146; Ireland, halo surrounding Tynagh deposit, 75-322; Sicily, in dolomitic limestone breccias, 75-1987; Switzerland, 75-938; USSR, ore genesis, 75-207; exhalative sedimentary processes, 75-1995; India, piemontite from 75-2411; Indian-Antarctic Ridge, 75-1145; Korea, supergene Mn oxide ores, 75-978; Brazil, amphibolites from, 75-3117
- encrustations, Gulf of Aden, geochem., 75-1567
- nodules, literature review, 75-1954; mineralogy, 75-3546; marine and freshwater, ESR study, 75-373; recovery from sea, 75-900; Zn distribution, 75-2229; radiochem. study, 75-1570; box corer for investigation, 75-1731; Indian Ocean, geochem., 75-1571, 1573; microscopic and electron probe study, 75-1572; Pacific Ocean, sub-surface concentrations, 75-1574
- spherulites, Canada, at intra-cretaceous disconformity, 75-3324
- Manganin wire pressure gauges, 75-1747
- Manganite, Gulf of Aden, encrustation, 75-1567 Korea, 75-978
- Mantle, high pressure phase transformations, 75-1008; oxygen fugacity, 75-3142 (1.6); transformation superplasticity, 75-1659
- plumes, and magnetic provinces, 75-1512; Ireland, basalts from, 75-2642
- , upper, mineralogical and chemical heterogeneity, 75-594; evidence of heterogeneity, 75-3690; evidence of layering, 75-3679; stability of mica, 75-3270, 3271; composition from ultramafic inclusions, in basalt, 75-2576; partial melting and conductivity anomalies, 75-1663; Italy, velocity anisotropy, 75-699
- Marble, Australia/Italy, metamorphosed, dolomite-calcite study, 75-1374; Czechoslovakia, deposits, geol. & petrog., 75-2705; USSR, Aldan shield, U/Pb age detn., 75-10
- Marcasite, Wales, 75-932; Germany, 75-934, 937; Turkey, 75-973; Russian SFSR, 75-2027; Western Australia, in Ni-sulphide ore deposit, 75-2495; New Britain, in exhalative sedimentary environment, 75-2039
- Margarite v. mica
- Marls, Cu-bearing, bedding, 75-908; Central Alps, metamorphism, 75-1616; Poland, as raw material, 75-626; New York, Late Pleistocene and Holocene deposits, 75-3806
- MARS, comparison with Earth, 75-2199; chem. investigation by XRF, 75-3901; review, 75-2784; formation of goethite and hydrated clay minerals, 75-2785; comparison with lunar geologic provinces, 75-2788; cratering and central peak statistics, 75-2796; surface and crust, 75-3915; dynamic processes, 75-3916; albedo features and topography, 75-3917; albedo changes, Earth-based observations, 75-2794; lava erosion in formation of channels, 75-2793; structural origin, 75-2795; origin of channels, 75-3902; pyramidal structures, 75-3903; craters, morphological classification, 75-3904; cratering and obliteration history, 75-3905; Mariner 4 reanalysis, 75-3906; craters, geologic history and surface processes, 75-3907; anal. of Mariner 9 photographs, 75-3908; polar caps, nature, 75-2797; palaeoclimatology, 75-3918; photometric observations, 75-3919; atlas of moons, 75-3909; photometry of satellites, 75-3910; Olympus Mons, elevation from limb photography, 75-2789; photogrammetry, 75-2790; proposed origin, 75-2791; Phobos and Deimos, Mariner 9 polarimetry, 75-3911; Tharsis region, tectonism and volcanism, 75-2786; thermal state and internal structure, 75-2787
- Martinique v. West Indies
- Maryland v. USA
- Mass spectrometry, CO₂ inclusions in olivine, 75-1285; Cd detn. in standard rocks, 75-53; Cr in lunar materials, 75-1257; identification of steranes and titerpanes, 75-1794
- Massicot, thermal expansion, 75-3858; transformation to litharge, 75-3147; Colorado, 75-2766
- Masson Hill, Derbyshire v. England
- Matildite, USSR, X-ray, 75-1365
- Matlock, Derbyshire v. England
- Matlockite, structure types, 75-1950
- Mattagami, Quebec v. Canada
- Mattagamite, Quebec, new mineral, chem., opt., X-ray, 75-3600
- MAURETANIA, Adrar, ages of unmetamorphosed series, 75-614
- Mawsonite, New Brunswick, 75-3559
- Mediangesetz, transformation twins, 75-850, 1883
- MEDITERRANEAN SEA, geol. of ocean basins, 75-2903 [52, 53]; basin plains, 75-614; deltaic sedimentation, 75-614; abyssal mud deposition, 75-1550; ophiolites, plagioclase lherzolite residual mantle relationships, 75-609; halite, Br content, 75-1180; Eastern Atlantic thermohaline staircase, 75-1691; SW, aeromagnetic survey, 75-2754; off Provence, seismological experiments, 75-1544; Tyrrhenian Sea, submarine volcanoes, 75-608; deep-sea magnesian calcite, 75-2511
- Melilite, Czechoslovakia, major and trace element analyses, 75-337; Texas, replacement by idocrase in skarn, 75-644
- , åkermanite, structure type, 75-1949; stability and paragenesis, 75-3252; in join åkermanite-anorthite-forsterite, 75-2145
- , olivine melilite, role of CO₂ in genesis, 75-2144
- , soda melilite, stability & paragenesis, 75-3252
- Mendeleev volcano v. USSR
- Mendozite, Western Australia, 75-3886
- MERCURY, surface radiative transfer, 75-3435; optical polarimetry, 75-2782; internal structure and thermal evolution, 75-2783
- Mercury, detn. by AAS, 75-1769, 1770; detection by portable spectrometer, 75-2319; in antimonite and realgar, 75-3035; thermal release from pyrite and sphalerite, 75-2490; in geochem. exploration, 75-3417; emanations in soils over deposits, 75-2320; Ireland, identification and analysis in sphalerite, 75-765;

Mercury (contd.)

- Sweden, in lake sediments, 75-2273;
USSR, mineralization in Triassic volcanic rocks, 75-206; *Russian SFSR*, in volcanic glass, 75-512; *California*, concentrations in marine sediments, 75-1175; *Ohio*, in sediments of *Lake Erie basin*, 75-1170; *Pennsylvania*, geochem. in sedimentary rocks, 75-1177; *Canada*, in Archaean rocks, 75-1230
- deposits, *Russian SFSR*, volcanic structure, 75-3638; *California*, wallrock alteration, 75-964
- minerals & compounds, α - $\text{Hg}_3\text{S}_2\text{Cl}_2$ natural occurrence, 75-551; organic, in coastal waters
- native, *Russian SFSR*, 75-2027
- Mertieite, *Russian SFSR*, 75-3568
- Merwinite, melting relations, 75-3165; *Ireland* and *California*, optical orientation and twinning, 75-1297; *Texas*, in skarn, 75-644
- Messelite, *North Carolina*, in spodumene pegmatite, 75-540
- Metabasic rocks, ophiolitic ^{18}O enrichment, 75-386
- Metabentonite v. montmorillonite
- Metaconglomerate, *Newfoundland*, origin & deformation, 75-1641
- Metadolerite dykes, *Wyoming*, clouded plagioclase in, 75-494
- Metagabbros, *Italy*, 75-933
- Metagreywackes, *California*, jadeite in, 75-1646
- Metahalloysite, hydrothermal dissociation, 75-1066
- Metakaolinite, defect structure, 75-1834
- Metallic ore deposits, 75-907; and continental drift, 75-905; metallic provinces, 75-3072; *Poland*, 75-971; *South Korea*, geotectonic movements, 75-951; *Taiwan*, 75-950
- Metallogenic belts, dip of Benioff zones, 75-904
- zoning, *USSR*, 75-946
- Metallurgy, solid state theory, 75-71
- Metals, accuracy of routine analyses, 75-44; phase transformations, 75-1882; grades of ores, 75-3065; liberation in plutonic igneous cycles, 75-1965; geochem. affinity of Co and Ge, 75-1013; mobilization from aquatic sediments, 75-2271; absorption on sedimentary and peat humic acids, 75-1185; spheroids and particles in impactite, 75-436; in chondrites, 75-428; *United Kingdom*, metalliferous potential, 75-197; *Switzerland & Germany*, accumulations in lake sediments, 75-3374; *Baltic Sea*, heavy metals in sediments, 75-366; *South Australia*, base metal mineralization, 75-2036; trace in *Arctic* desert landscape, 75-414
- Metamict state, 75-882; zircon, 75-440
- Metamorphic banding, mechanical production, 75-2691
- processes, nonequilibrium thermodynamics, 75-3151
- zones, *Nepal*, 75-3841
- Metamorphism, high pressure conditions, 75-1645; high temperature facies, book, 75-2905; and ancient continental margins, 75-2903 [66]; contact, isochemical, 75-2679; mixed-volatile ($\text{H}_2\text{O}-\text{CO}_2$) equilibrium, 75-250; carbonaceous materials as indicators, 75-2668; *Norway*, of granogabbro, 75-1602; *Russian SFSR*, facies and types of graphitic rocks, 75-513; *Saudi Arabia*, ore-forming process, 75-3088; *California*, of ultramafic rocks, 75-653; *S. Appalachians*, age detn., 75-1722
- Metamorphic rocks, petrogenesis, book, 75-1814; Fe-Ti oxide minerals in, 75-2469; crystallization of garnet, 75-2402; high grade, microstructural terminology, 75-1600; *Norway*, chem. and stable isotopes, 75-1188; *Poland*, Caledonian basement, 75-662; *South Africa*, geochron. and petrogen., 75-2819; *Japan*, graphite from, 75-671; containing zoned epidote, 75-457; *China*, isotopic ages, 75-15; *New South Wales*, 75-1432; *New Caledonia*, O isotope study, 75-1190; *Canadian Arctic*, Rb/Sr ages, 75-2835; *Peru*, Precambrian, 75-3852
- Meta-ophiolites, *Italy*, dated to Alpine metamorphism, 75-3832
- Metapelites, iron content and PT conditions, 75-654; *Italy*, barometric significance of potassic white micas, 75-2425; *Russian SFSR*, chloritoid and staurolite in, 75-1631
- Metasediments, *Scotland*, Rb/Sr isotope studies, 75-1700; *Canada*, Archaean, origin of biotite in, 75-474
- Metasomatism, infiltrative, dynamics, 75-389
- Metasomatites, *Russian SFSR*, in carbonatite intrusions, 75-1599
- Metastibnite, *Russian SFSR*, 75-2027
- Metavauxite, polymorphism, 75-3056
- Metavivianite, new mineral, *S. Dakota*, X-ray, 75-1393
- Meteor, *North America*, 1972, 75-2375
- Meteoroid impact on Earth and Moon, 75-1252
- Meteorites,
- | | |
|---|-------------------------------|
| Alais, 75-3445 | Khor Temiki, 75-1266, 2388 |
| Allende, 75-431, 1275, 1276, 2382, 2384-2386, 3442-3444 | Lancé, 75-1275 |
| Anlung, 75-1269 | Leoville, 75-2387 |
| Assam, 75-1261 | Morasko, 75-1262 |
| Bjurböle, 75-1261 | Murchison, 75-431, 2380, 3438 |
| Boxhole, 75-1263 | Murray, 75-2381 |
| Bruderheim, 75-1259, 3436 | Nantan Co., 75-432 |
| Bununu, 75-3446 | Nedagolla, 75-433 |
| Bustee, 75-554 | Ngawi, 75-1270, 1271 |
| Canyon Diablo, 75-1261 | Odessa, 75-1261 |
| Cold Bokkeveld, 75-1261, 3445, 3448 | Ogessa, 75-431, 3445, 3448 |
| Coolidge, 75-2387 | Peace River, 75-1259 |
| Fayetteville, 75-425 | Plainview, 75-427 |
| Felix, 75-1275 | St. Mesmin, 75-429 |
| Gibeon, 75-2390 | St. Severin, 75-3437 |
| Hallingeberg, 75-430 | San Cristobal, 75-1267 |
| Hart Range, 75-1263 | Stannern, 75-1259 |
| Juvinas, 75-3439 | Tucson, 75-1265 |
| Kapoeta, 75-425, 1261 | Wolf Creek, 75-1320 |
| | Yilmia, 75-1268 |
- classification and properties, book, 75-70; specimen slicing method, 75-2849; in University of Bologna collection, 75-2391; spectral reflectivities, 75-3441; fluorescence of organic inclusions, 75-3448; palaeomagnetism in carbonaceous chondrites, 75-2382; possible formation of chondrules, 75-2378; shock effect in enstatite-achondrite, 75-2388; fission tracks in Allende chondrite, 75-2385; mech. props. of Gibeon, 75-2390; energetic impact in Ngawi chondrule, 75-1270, 1271; achondritic, oxygen fugacity, 75-2082; opt. props. of carbonaceous chondrites and asteroids, 75-2383; gas-rich, irradiation history and origin, 75-425; stony, measurement of ^{26}Al , 75-426; stony, foreign inclusions, 75-427; *Western Australian* irons, analyses, 75-1264
- age detn., of Juvinas basaltic achondrite, 75-3439; of bediasites, *Libyan* desert glass, moldavites and *Ivory Coast* tektites, 75-1284
- chemistry, rare earths in Allende, 75-3442; inclusions in Allende, 75-2386; Anlung chondrite, anal., 75-1269; glass in Bununu, 75-3446; solar flare rare gas in Khor Temiki aubrite, 75-1266; purines and triazines in Murchison, 75-3438; amino acids in Murchison, 75-2380; deuterium content, 75-1258; ^{26}Al production rate in chondrites, 75-1272; trace elements in enstatite chondrites, 75-1273, 1274; metal phase in unequilibrated ordinary chondrites, 75-428; subgroups of HL chondrites, 75-2387; chondrules from carbonaceous chondrites, 75-1276; Li, Na and K in carbonaceous chondrites, 75-1277; diffusion of ^3He in chondrites, 75-3447; RE, Ba, Fe, Mg, Na & K in carbonaceous and ordinary chondrites, 75-431; total nitrogen in, 75-1261; U & Th in, 75-1259; Cd and Zn in, 75-1260
- craters, *Ries* crater and excavation mechanics, 75-1278, 1279, 1281; *USSR*, *Popigai*, coesite in breccia and impactite, 45-434; *India*, *Lunar Crater*, possible meteoritic origin, 75-2392; *Ramgarh*, 75-2393; *Arizona*, *Barringer*, spheroids and particles in impactite, 75-436; *Quebec*, *West Clearwater Lake*, fluid immiscibility in glass, 75-435; *Brazil*, impact origin, 75-1282
- falls, *China*, *Nantan Co.*, iron meteorite shower, 75-432
- impact, *Fennoscandian Shield*, shock-melted rocks, 75-3449; *Brazil*, astroleles, 75-1282
- isotope studies, Xe in carbonaceous chondrite Murray, 75-2381; rare gases and O isotopes in carbonaceous chondritic xenolith, 75-427
- mineralogy, Ca-rich inclusions in Allende, 75-3443; Al-Ti-rich pyroxenes in Allende, 75-2384; olivine in pallasites, 75-2389; phyllic minerals, 75-3445; minor & accessory components in mesosiderites, 75-3440
- petrology, chondrules in Allende, Felix and Lancé, 75-1275; chondrules in Hallingeberg, 75-430; St. Mesmin chondrite, 75-429
- Methane, *Labrador Shelf*, in Recent sediments, 75-1221
- MEXICO, volcanic traps, 75-3713; *Baja California* and *Sonora*, heat flow and radioactivity, 75-2746; *Guanajuato*, acanthite and agularite, 75-3564; *Gulf of California*, secondary anhydrite, 75-2507; *Moctezuma*, xocomacatlite and tlalocite, new minerals, 75-3606; carlfriesite, new mineral, 75-3593; cesbronite, new mineral, 75-549; *Sierra de Tamalipas*, alkaline magmatic phases, 75-3714; *Sonora*, metal resources, 75-3093; 3094; creaseyite, new mineral, 75-3595; voids in labradorite phenocrysts, 75-495; *Tenango*, basalt, 75-3748; *Valley of Mexico*, volcanic rocks, 75-3747; *Yakatan Peninsula*, palygorskite-sepiolite clays, 75-115
- Mica, dioctahedral, crystal structure, 75-155; fine-grained, formation of laths, 75-154; effect of acid treatment, 75-89; selected area electron diffraction patterns, 75-77; fission particle tracks, 75-3507; rehydration of mica-montmorillonite, 75-798, 799; potassium, stability diagram, 75-802; epitaxial growth of dolomite on, 75-1048; in soils, K release, 75-1843; Li-Fe series, IR-spectra, 75-3496; synthetic

(contd.)

- Ag^{IV}, crystal structure, 75-3012; Na mica, synthesis and stability, X-ray, 75-291; *Scotland*, resources, 75-2067; *France*, white, chem., 75-1317; *Western Alps*, K/Ar and Rb/Sr dating, 75-3; *Italy*, lithium-mica, anal., X-ray, opt., 75-2427; in metapelites, barometric significance, 75-2425; *Japan*, with montmorillonite in altered tuff, 75-1866; interstratified mica-montmorillonite, 75-1840; *California*, Li-Al, X-ray, 75-2431; *Virginia*, in deformed supracrustal assemblage, 75-674
- annite, hydrothermal stability, 75-2155
- barium, structure refinement, 75-868
- biotites, IR spectra, 75-1901; age detn., 75-1697; iron oxidation and reduction effects, 75-797; effect of K on dissolution rate, 75-3272; K depleted oxy-biotite, alteration products, 75-91; K exchange, oxidation and reduction, 75-800; polygenetic, Nb, Ti, Zr concentrations, 75-473; replacing almandine 75-3266; alteration in weathered granite, 75-1871; biotite-sulphide equilibria in granites, 75-2209; from tonalitic rocks, 75-469; helicitic, from pelitic hornfels, 75-645; shock-loaded, structural deformation, 75-1062; Pb isotope ratios, 75-1126; *Cornwall*, thermal decomposition, 75-2153; *Aberdeenshire*, in weathered gabbro, 75-828; *France*, orientation in quartziferous dolerite, 75-755; *Spain*, in graphic hornfels dykes, 75-2684; *Porgugal*, in lamprophyre, 75-2562; muscovite-biotite albite granite, 75-1598; *Sicily*, from cinerite, anal., opt., X-ray, 75-2636; *Greece*, 75-3726; magnetic behaviour, 75-687; *Sweden*, fission track studies, 75-2803; *Norway*, in granogabbro, 75-1602; *Poland*, from granites, 75-472; *Russian SFSR*, in metapelite schist, 75-2713; *Africa*, inclusions in diamond, 75-511; *Egypt*, in granitic rocks, anal., 75-1314, 1315; *Malagasy Rep.*, in granodiorite, 75-1445; artificial alteration, 75-818; *India*, 75-1473; from granitic rocks, 75-2429; in gneisses, Ag content, 75-2218; *Japan*, 75-1635; interstratified with vermiculite, 75-93; weathered to vermiculite, 75-94; *Western Australia*, from granulites, 75-1298; *USA*, 75-1643; *Arizona*, as source of S in porphyry Cu deposits, 75-920; Cu, Mn and Zn partitioning, 75-2423; *California*, Mössbauer study of Fe³⁺/Fe²⁺ ratios, 75-3490; *Colorado*, 75-3711; *Wyoming*, K/Ar dates, 75-1724; *N-W Territories*, in Archaean meta-sediments, origin, 75-474, 646; *Ontario*, 75-673; *Quebec*, ⁴⁰Ar/³⁹Ar release ages, 75-2837; *Venezuela*, in gneisses, 75-675; *Brazil*, 75-677
- celadonite, *Italy*, compared with glauconite, 75-2434; *Indian Ocean*, in basalt, anal., 75-2647; *Arizona*, 75-231
- fuchsite, *Taiwan*, in gold-bearing rock, anal., opt., X-ray, 75-2433
- hydrobiotite, *India*, opt., 75-479
- illite, synthesis, 75-2942; thermal expansion, 75-2730; thermal transformation, 75-2158; lath-shaped, formation, 75-803; order-disorder relations, 75-1825; fine grained, lath shaped units in, 75-1828; aqueous dissolution under ambient conditions, 75-1826; free energy of formation, 75-1063; acid treatment, 75-1842; visible and near infrared absorption coefficients, 75-805; heated, potassium exchange, 75-816; coating on quartz, 75-2653; Na-, electron microscopy, 75-76; phosphate transport due to consolidation, 75-98; Na illite-silt mixtures, 75-97; in weathered Oxford Clay, 75-829; oceanic distribution, 75-1551; *France*, in *Golfe du Lion* sediments, 75-832; *Germany*, in weathered trachytic tuffs, 75-834; *Italy*, interlayer illite-montmorillonite in clays, 75-1848; *Czechoslovakia*, in shales, 75-1178; *Poland*, mixed-layer montmorillonite-illites, 75-2957; *Illinois*, boron in clays, 75-3375; *Gulf of Mexico*, in sediments, distribution maps, 75-1740
- , kinoshitalite, new mineral, Ba content and X-ray intensities, 75-476, 3598
- , lepidolite, cell discontinuities, 75-1902; *Mozambique*, alteration, 75-2419
- , lepidomelane, *Japan*, thermal transformations, anal., 75-3265
- , margarite, 2M-, synthesis and upper stability limit, 75-1064; *Swiss Alps*, 75-3511
- , muscovite, melting relations, 75-3267; sectorial structure, 75-2993; hydroxyl orientation, 75-867; age detn., 75-1697; thermodynamic props. 75-2156; thermal transformations, 75-2157; stability with quartz, 75-3268; Nb, Ti, Zr concentrations, 75-473; electron extinction distance, 75-2729; synthetic lithian, cell discontinuities, 75-1902; weathering, behaviour of Be in pegmatites, 75-2228; in leucogranites and granitoids, 75-3494; *Ireland*, 75-459; from pegmatite, 75-441; *France*, in biotite-staurolite-garnet schist, anal., opt., X-ray, 75-1316; *Portugal*, muscovite-biotite-albite granite, 75-1598; *USSR*, tin content, 75-324; *Kenya*, with reverse pleochroism, 75-2426; *India*, fission track ages, 75-1812; *Japan*, 3T polytype, anal., opt., X-ray, 75-3493; *USA*, 75-1643; *Kansas*, 75-1591; *Ontario*, 75-673
- , paragonite, *New Caledonia*, 75-3504
- , phengite, *Germany*, manganoan, 75-2407; *Japan*, 75-1635; *Tasmania*, Si⁴⁺ variation, 75-2428; *New Caledonia*, 75-3504
- , phlogopite, structure by neutron diffraction, 75-153; stability with enstatite, 75-3271; potassium exchange and hydration, 75-290; Ba-K exchange, 75-3269; phase relations, 75-2080, 3270; anal., 75-3172; free energy of formation, 75-3254; weathering to saponite, 75-2953, 3497; effect of Ba on X-ray intensities, 75-476; Zn-, low temp. synthesis, 75-2154; *Helen's Reef*, 75-2538; *Germany*, manganoan, 75-2407; *Sweden*, fission track studies, 75-2803; *Finland*, tetraferriphlogopite, 75-3495; *Russian SFSR*, glimmerite, 75-643; *South Africa*, from kimberlites, 75-2430; *China*, chrome-, anal., opt., X-ray, 75-475; *Western Australia*, 75-3886; *Jan Mayen I.*, X-ray, 75-1318; *Arizona*, 75-3712
- , sericite, *Germany*, in quartz-keratophyre tuff, anal., X-ray, 75-833; *Japan*, anal., 75-1865
- , zinnwaldite, *India*, from pegmatite, anal., X-ray, 75-2432
- Michenerite, *Ontario*, crystal structure, 75-3041
- Michigan v. USA*
- Microcline v. feldspar
- Microdilatometry, high temp., 75-757
- Microfossils, *Australia*, in Pb-Zn-Ag deposit, 75-2035
- Microgabbroic rocks, *Rockall*, Cretaceous, 75-1515
- Microlite, *China*, anal., 75-3108; *Manitoba*, antimonian, 75-3548
- Micropegmatite, *India*, in quartz dolerite, 75-1450
- Microperthite, sodic-, high temp. homogenization, 75-2163
- Microphotometry, high temp., 75-757
- Microscope slides, gelatin coated, for sediment size analysis, 75-2858; ultra-thin thin sections in carbonate petrol., 75-2860; instant peels using polyester resin, 75-2861
- Microscopy, reflectance, estimation of particle size, 75-2848; optical and electron-, in mineral grain study, 75-2846; optical, reduction of ilmenite, 75-1025
- Microsplitter, sampling small particles, 75-1739
- Microstructures, *Arizona*, of biologic origin, 75-1592
- Migmatites, in system quartz-orthoclase-albite, 75-1464; *Spain*, 75-660; *Pyrenees*, types and origins, 75-1607; *Norway*, 75-561; *Turkey*, 75-1630; *USSR*, K/Ar ages, 75-7; *Australia*, geochron., 75-733; *Greenland*, age detn., 75-1720
- Migmatization, *India*, in Peninsular gneisses, 75-2721
- Milarite, *Kazakhstan*, crystal structure, 75-3020
- Millerite, *Italy*, 75-1360; *India*, linnaeite intergrowths in Cu sulphides, 75-1996
- Milos v. Greece*
- Minaes Gerais v. Brazil*
- Minerals, index, 75-1806; crystals and rocks, book, 75-58; in colour, book, 75-1801; encyclopedia, 75-790; in thin section, identification tables, 75-2913; man and resources, 75-901; World supply, 75-192; resources of continental margins; 75-2903 [71]; exploration, 75-194; XRD application, 75-913; computer application, 75-914; collecting, book, 75-786; collecting underground, 75-1737; infrared spectra, book, 75-59; national policies, 75-903; healing effects, 75-717
- Mineral collections, World directory, 75-66
- Mineralogy, determinative techniques, 75-915
- Minettes, *Czechoslovakia*, 75-591
- Miniphotometer, for ore microscopy, 75-1745
- Minnesota v. USA*
- Minnesotaita, Canada*, 75-221
- Mississippi v. USA*
- Missouri v. USA*
- Mixing models for crystalline silicate solid solns., 75-245
- Mixite, *Germany*, with chlorotile, 75-2505
- Mixtites, *Angola*, glaciogenic origin, 75-1556
- Miyagi Pref. v. Japan*
- Mocetzuma v. Mexico*
- Mohave Co., Arizona v. USA*
- Moldavites, origin, 75-2394
- Molybdates, *Chile*, absorption by soils, 75-2945
- Molybdenite, host mineral for rhenium, 75-910; real space crystallography, 75-891; polytypes from spectral reflection curve, 75-3567; *Sutherland*, mineralization in Precambrian rocks, 75-930; *Greece*, 75-2022; *USSR*, 75-947; dissociation to form koechlinite, 75-542; *Russian SFSR*, from Quaternary volcanic rocks, 75-528; *China*, 75-3108; three polytypes, 75-

- Molybdenite (*contd.*)
 3566; *Queensland*, 75-1366; pipe-like deposits, 75-2033; *Australia*, *Papua New Guinea*, polytypes, 75-1364
- Molybdenum, in zircon 75-439; in soils and sediments, 75-1765; *Sweden*, in alum shale, 75-3377; *Canada*, porphyry mineralization, 75-2326
- compounds, α - $\text{MoO}_3 \cdot \text{H}_2\text{O}$, structure, 75-1925
- deposits, two-stage oxidation, 75-3074; *China*, Pt metals in, 75-3566; *USA*, disseminated Cu-Mo deposits, 75-913
- Monazite, geothermometer, 75-2330; *Northumberland*, 75-931; *France*, in granites, 75-3346; *Italy*, in pegmatite, 75-1674; *Finland*, 75-3584; *Liberia*, economic potential, 75-1991; *China*, 75-3108
- Monchiquite dykes, differentiation, 75-2581
- Monetite, in human pathology, 75-2515; *Western Australia*, 75-3886
- MONGOLIA, Jurassic volcanic series, 75-2568; *E.*, chemical zoning of ground water, 75-1195; *Delger Han Soman*, age of Permian-Triassic volcanic rocks, 75-9; *Hangay-Hentey* rare-metal pegmatite belt, 75-211
- Mono Co., *California v. USA*
- Monroe Co., *Tennessee v. USA*
- Mont St. Michel *v. France*
- Montagne Noire, *Hérault v. France*
- Monte Carlo calculations, lunar regolith thickness, 75-1251
- Monta Somma *v. Italy*
- Montgomeryite, related to vauxite, X-ray, 75-1377; *Western Australia*, 75-3886
- Monticellite, structure type, 75-1949
- Montmorillonite, layer structures, 75-1838; transformations and volatile pressures, 75-2159; free energy of formation, 75-1063, 2935; conversion, 75-1860; fulvic acid- Cu^{2+} montmorillonite interaction, 75-112; interaction with Cu^{2+} , 75-2929; ESR spectra of Mn^{2+} , 75-1819; heterogeneity of charge density, 75-1827, 2932; Ca-, hydration, 75-2933; stability of Fe and Al hydrous oxide coatings, 75-2931; detn. in small samples, 75-2922; surface acidity, 75-1832; effects of acid treatment, 75-89; inclusions in glass, 75-435; studies on sorption complexes, 75-809; interlamellar and multi-layer nitrogen sorption, 75-82; montmorillonite-mica with high rehydration ability, 75-798, 799; crystals in montmorillonite-dextran complexes, 75-105; adsorption and oxidation of benzidine and aniline, 75-108; thiophene complexes saturated with different cations, 75-812; adsorption of silver-thiourea complex, 75-806, 807; visible and near-infrared absorption coefficients, 75-805; reduced charges, props. of hydrated Cu^{2+} ions, 75-78; reduced charge, tetra-alkylammonium ion exchange forms, 75-813; permanent and induced dipoles, 75-814; swelling in polar organic liquids, 75-808; reaction with sea-water, 75-2936; oceanic distribution, 75-1551; *France*, *Golfe du Lion*, in sediments, 75-832; *Belgium*, Li-bearing, mixed layer montmorillonite-chlorite, 75-830; *Germany*, in weathered trachytic tuffs, 75-834; *Italy*, interlayer illite-montmorillonite in clays, 75-1848; *Greece*, thermal analysis, 75-2985; *Poland*, formed during alteration of Carboniferous tuff, 75-2957; *Kazakhstan*, Zn-bearing, opt., 75-1861; *Chad*, Mg-, stability, 75-2934; *Mozambique*, dioctahedral, in pegmatite, 75-2419; *Japan*, with mica in altered tuff, 75-1866; interstratified mica-montmorillonite, 75-1840; *Pacific Ocean*, Fe-, anal., 75-2951; *Arizona*, *Wyoming*, *Morocco*, electron-optical study, 75-80; *Oklahoma*, mixed-layer chlorite-montmorillonite, 75-845; *Wyoming*, exchangeability of potassium, 75-2952; *Brazil*, Ni-, chem., 75-2955
- , beidellite, *Poland*, in Pliocene clays, 75-837; *New Zealand*, ferriiferous, 75-842
- , hectorite, visible and near-IR absorption coefficients, 75-805; ESR spectra of Mn^{2+} , 75-1819; chemisorption of anisole on Cu^{2+} hectorite, 75-114; adsorption and oxidation of benzidine and aniline, 75-108
- , metabentonite, visible and near-IR absorption coefficients, 75-805; heated, potassium exchange, 75-816; *Russian SFSR*, structural series, 75-2962
- , nontronite, ESR spectra of Mn^{2+} , 75-1819; visible and near-IR absorption coefficients, 75-805; oxygen K absorption spectra, 75-2986; reduction of structural ferric iron, 75-1823; *New Caledonia*, Ni-, free energy of formation, 75-2935; *New Hampshire*, 75-2762
- , Na-, stability diagram, 75-802; chem. stability, 75-2930; electron microscopy, 75-76; flocculation by electrolytes, 75-810
- Monzonites, *Italy*, modal & petrochem. study, 75-2564; *Manitoba*, quartz-, revised Rb/Sr age, 75-2839; *Greenland*, age detn., 75-1720
- Mooihoekite, synthesis, 75-1029
- MOON, geology, 75-1233; evolution, 75-2351; accretion, 75-2361; large craters, ejecta, 75-2363, 2364; central peak heights and crater origins, 75-3433; origin of surface features, 75-2386; physics, 75-2358; meteoroid impact, 75-1252; gravity anomalies, 75-3432; microwave emission spectrum, 75-3425; abundance of siderophile elements, 75-312; comparison with Martian geologic provinces, 75-2788; moonquake predetermination and tides, 75-2354; *Deslandres*, structural analysis, 75-2362; *Mare Humorum*, spectral reflectivity, 75-3434; *Silver Spur*, cross-hatching, 75-2359; *v.* also, lunar studies
- Moravia *v. Czechoslovakia*
- Mordenite *v.* zeolite
- Morenosite, *Western Australia*, 75-3886
- MOROCCO, age of unmetamorphosed series, 75-614; age of dolerites, 75-2815; Miocene volcanism, 75-3728; palaeomagnetism of Msihi norite, 75-3872; *Anti-Atlas*, ages of Precambrian rocks, 75-2816; *eastern Atlas*, Tepee structures in intertidal carbonate sands, 75-1554; *Bou Azzer*, alloclastite, 75-3142 (IV.3); *Camp-Berteaux*, montmorillonite, 75-80; *Jbels-Tekerna-Kannoufa*, shallow-water fossils, 75-1418; *Tafraoute massif*, age of granites, 75-2814; *Talate n'Ouamane*, sedimentary structures and mineralization, 75-908
- Morrue *v. Mozambique*
- Morvan Mts. *v. France*
- Moss *v. Norway*
- Mössbauer spectroscopy, spectral fitting, 75-2988; Fe in Fe-Ni-S system, 75-886; synthetic spinels, Fe_3O_4 - γ - Fe_2O_3 , 75-880; siderite, 75-3049; $\text{Fe}^{2+}/\text{Fe}^{3+}$ in silicates, 75-2421; Mg-Fe richterites, 75-289; 3d levels in silicate garnets, 75-3002; cumingtonites, 75-3486; $\text{Fe}^{2+}/\text{Fe}^{3+}$ in hornblendes and biotites, 75-3490; thermal decomposition of biotites, 75-2153; iron orthoclase, 75-870; Fe in rhodonite, 75-1898; gadolinites, 75-304; Fe impurities in kaolinite, 75-1816; Ca-Fe pyroxenoids and lunar pyroxferroite, 75-1896; Fe compounds in *Canadian lake sediments*, 75-1172
- Mt. Edziza, *BC v. Canada*
- Mt. Etna, *Sicily v. Italy*
- Mt. Isa, *Queensland v. Australia*
- Mt. Olympus *v. Greece*
- Mt. Windarra, *WA v. Australia*
- Mountainite, *Russian SFSR*, 75-1394
- MOZAMBIQUE, scandium ixiolite, 75-520; *Cabora Bassa*, petrographic study, 75-2553; *Libombos*, bentonite, 75-2968; *Morrue*, xenotime, 75-3586; *Namivu* pegmatite, alteration of spodumene and lepidolite, 75-2419; *Zambézia*, zircon-hafnion series, 75-2521
- Mpororoite, *Uganda*, new mineral, X-ray, chem., 75-3601
- Mud, *Mediterranean*, abyssal, deposition rates, 75-1550; *Canada*, tidal flat, polished and striated surfaces, 75-637
- Mugearites, upper mantle source, 75-2577
- Mullite, IR frequency calculations, 75-3004; effect of atmospheres on formation from kaolinite, 75-297; silica-free phases, 75-2102, 2103; reaction sequence with kaolinite, 75-2160; *Spain*, in sedimentary facies, 75-3460
- Multiple sclerosis, related local geochem., 75-3325
- Muscovite *v.* mica
- Mylonites, superplasticity, 75-3819
- Myrmekite, historical review, 75-2534
- Mysore *v. India*
- Nagano Pref. *v. Japan*
- Nahcolite, detn. in oil shales, 75-753, 2072
- Namaqualand *v. South Africa*
- Nantao Co. *v. China*
- Natrolite *v.* zeolite
- Naumannite, comparison with acanthite and aguilairite, 75-3564; *New Zealand*, 75-2038
- Nebula, solar, chemistry, 75-424
- Neodigenite, *Switzerland*, 75-3104; *Sardinia*, 75-968
- Neon-type structure, refractive indices of compounds, 75-688
- NEPAL, *Himalayas*, metamorphic zones, 75-3841; pink gneiss, 75-3842
- Nepheline, IR detn. of H_2O , 75-3525; carnegieite-nepheline transition, 75-2179; in system apatite-nepheline-villiaumite, 75-1071; in system nepheline-villiaumite-LiF, 75-252; (Na, K) AlSiO_4 -(Na, Rb)- AlSiO_4 solid solns., 75-1072; *Austria*, 75-1682; *Zaire*, from recently erupted lavas, anal., 75-3731; *India*, as metasomatic product, 75-647
- syenite, calcite-bearing, in synthesis of scapolite, 75-299; *Portugal*, 75-3664; *Germany*, containing titan-pyroxenes, 75-285; *Finland*, petrol., etc., 75-3654; *Russian SFSR*, containing wöhlerite group minerals and titan-rozenbuschite, 75-460; *Egypt*, K/Ar ages of ring complexes, 75-1712
- Nephelinites, *Czechoslovakia*, major and trace element analyses, 75-337
- Nepouite, serpentine component, 75-486
- Neptunite, *Russian SFSR*, 75-1396
- Nesquehonite, thermal decomposition, 75-3232
- Neutron activation analysis, trace element data, 75-1223; trace elements in quartz sands, 75-1787; detn. of Al and Zr, 75-

- on (*contd.*)
 000; O and Si in diamond, 75-1345;
 old in bauxite, 75-3337; Ag in Pb, Cu
 and Zn concentrates, 75-2882; U in
 rocks and minerals, 75-780; Rb, Cs, Ba
 and RE elements in ultramafic rocks,
 75-38; sodium in *Arctic and Antarctic*
low strata, 75-1788
 Diffraction studies, amorphous solid
 water, 75-2996; phlogopite structure,
 75-153; Cu in CuCl, 75-897; KCl, 75-
 86; Debye-Waller coefficient, 75-898;
 HCO₃ and KDCO₃, 75-1942; Na H₂-
 SO₄ · H₂O, 75-3032
La v. USA
Brunswick v. Canada
Caledonia v. Pacific Ocean
Guinea v. Papua New Guinea
Hampshire v. USA
Jersey v. USA
Mexico v. USA
 Minerals, chemical index, 2nd appendix,
 75-2519; 28th list of new names, 75-
 388; andremeyerite, 75-3589; arista-
 nite, 75-547; balpholite, 75-3589;
 arrierite, 75-3591; baumite, 75-3592;
 zirite, 75-2520; brüggenite, 75-1389;
 alcianorite, 75-548; carlfriesite, 75-
 593; cayschite, 75-3594; cesbronite,
 75-549; corderoite, 75-551; creaseyite,
 75-3595; frankdicksonite, 75-1390;
 didonayite, 75-3596; glaukosphaerite,
 75-552; haapalaite, 75-3597; hafnon,
 75-2521; honquillite, yixunite, dayingite,
 gzhongite, malanite, daomanite,
 gongshiite, guanglinite, fengluanite,
 gzhongite, 75-2522; hydro-astrophyll-
 ite, 75-555; incaite, 75-1391; kazakhov-
 ite, 75-1392; kelleite, 75-2523; khibin-
 ite, 75-556; koashvite, 75-2524; kino-
 italite, 75-476, 3598; krupkaite, 75-
 599; laffittite, 75-1395; laplandite,
 75-2525; mattagamite, 75-3600; meta-
 vianite, 75-1393; mpororoite, 75-3601;
 alladoarsenide, 75-557; paulovite, 75-
 58; penkvikskite, 75-1394; phosinaite,
 75-2526; pinchite, 75-3602; platinum
 rhodium, rhodian platinum, 75-3603;
 outhierite, 75-1395; sazhinite, 75-1396;
 cinnerite, 75-1397; solongoite, 75-559;
 relkinite, 75-2527; telargpalite, 75-
 528; tellurantimony, 75-3600; temaga-
 nite, 75-3604; testibiopalladite, hexa-
 tibiopanickelate, hexastibiopalladite,
 75-2529; tilacote, 75-3606; tulameenite,
 75-3605; umbozerite, 75-1398; whitmore-
 ite, 75-1399; wroewolfeite, 75-2530;
 ocomecatlite, 75-3606; yedlinite, 75-
 531; zirsinalite, 75-2532; (Pt, Pb) (Bi,
 b), 75-2533
South Wales v. Australia
York v. USA
 ZEALAND, active continental margins,
 75-2903 [63]; water from hydrothermal
 areas, 75-1014; *Barrytown*, tungsten,
 biogeochemical exploration, 75-2339;
Broadlands geothermal area, chem., 75-
 2292; sphalerite geothermometry, 75-
 1362; *Canterbury*, Coalgate bentonite,
 75-842; *Gt. Barrier I.*, Ag-Au deposits,
 75-2038; *Jerry R.*, native Ni, 75-3532;
Kakanui, hornblende, 75-3483; *Mohaka*
R., mackinawite and pyrite in hot spring
 deposit, 75-2488; *Mt. Pihanga*, high
 alumina basalt, IR spectra, 75-3174;
Nelson, cymrite in black shale, 75-3887;
Ohaki Broadlands, geothermal area,
 altered rocks, 75-3329; *Wairaki*, hot
 springs, 75-400; *Westland*, xenoliths in
 diatreme, 75-3472
 Newberyite, in human pathology, 75-2515;
Western Australia, 75-3886
Newfoundland v. Canada
 NICARAGUA, *Cerro Negro volcano*, 1971
 eruption, ash flow, 75-3749; *Rio Pis Pis*,
 deformation and recrystallization of
 sulphides, 75-2045
 Niccolite, *Spain*, cordierite-chromite-niccol-
 ite ores, 75-1978; *Czechoslovakia*, 75-2503
 Nickel, detn. in ores by AAS, 75-1760,
 1778; Ni²⁺ optical spectra in spinels, 75-
 3185; ions on Kieselguhr G., 75-1795;
Italy, in ultramafic rocks, 75-1441;
Burma, Cu-Ni-Co mineralization, 75-
 3106; *Canada*, geochem., 75-2323;
Quebec, enrichment of intrusive com-
 plex, 75-2327; *Surinam*, in gabbro, 75-340
 — deposits, *USSR*, age of Ni-Co mineraliza-
 tion, 75-2825; *Western Australia*, super-
 gene alteration, 75-2495, 3332, 3333
 — minerals and compounds, silicate, ser-
 pentine component, 75-486; Ni₂SiO₄,
 spinel polymorph, crystal structure, 75-
 276; *Czechoslovakia*, Ni-arsenides, 75-2503
 Nickelhexahydrite; *Finland*, 75-3571
 Nickel-iron, native, gold and rhenium con-
 tent, 75-312; *Italy*, 75-1360; *New*
Zealand, from stream sediments, anal.,
 opt., 75-3532
 NIGERIA, anorthosite, 75-3668; age and
 origin of Mesozoic granites, 75-2818;
Balfour Hill, sediments, topaz in tuffis-
 ites, 75-1419; *Iperu*, sandstone-derived
 soils, 75-2965; *Niger Valley*, origin of
 ironstones, 75-3086; *Niger delta*, sedi-
 mentation, 75-1555
 Nigerite, *Brazil*, in tin-tantalite pegmatites,
 75-233; in quartz-cassiterite veins, 75-967
Ninetyeast Ridge v. Indian Ocean
 Niobium, XRF detn. in ilmenite, 75-1783;
 isotope observation in nature, 75-1131;
 photometric detn. of P in ores, 75-1779;
 spectrophotometric detn., 75-40; distri-
 bution in phyllosilicates, 75-473;
Canada, deposits, 75-2001
 — minerals, complex niobium oxides, crystal
 chemistry, 75-882
 Niobaeschynite v. aeschynite
 Nitrate deposits, *Chile*, containing brüggen-
 ite, 75-1389
 Nitrogen, sorption by homoionic mont-
 morillonites, 75-82; in meteorites, 75-
 1261; in lunar fines, 75-422; *Russian*
SFSR, in ultramafic rocks, 75-3415
 Nitrogenous substances, 75-2907 (3)
 Noble gases, primordial, in deep Earth, 75-
 1157; in meteoritic whitlockite, 75-3437;
Canada and Gabon, in old uranium
 deposits, 75-2318
 — metals, separation and concentration,
 75-1763; isothioronium cpds. as liquid-
 liquid extractants, 75-2877
 Nontronite v. montmorillonite
 Nordite, *Russian SFSR*, 75-1396
Noril'sk, Russian SFSR v. USSR
 Norite, *Greenland*, age detn., 75-1720
 Norsethite, formation by precipitation at
 room temp., 75-273
 Norstrandite, *Colorado*, 75-3553
 NORTH AMERICA, continental margin, 75-
 2903 [29-31, 56-60]; rupture of North
 American-Western European palaeoblock,
 75-2774; quartz grain surface textures,
 75-2454; natural sodium sulphate, 75-
 3129; *Great Lakes*, iron phosphates in
 sediments, 75-1376; *Lakes Ontario and*
Erie, humic substances in sediments, 75-
 2280; *Rocky Mountain trench* and *St.*
Eugene formation, 75-1580
North Carolina v. USA
 NORTH SEA, lithostratigraphic nomencla-
 ture, 75-1400; uranium mining from sedi-
 ments, 75-200; *Skagerrak*, coralline algal
 nodules, carbonate cementation, 75-3379
Northern Territory v. Australia
Northumberland v. England
 Northupite, *Chad*, in evaporites, 75-3885
North-West Territories v. Canada
 NORWAY, continental margin, 75-2903
 [26]; RE distribution in basic and ultra-
 basic rocks, 75-3361; trace element
 chem. of gabbro/amphibolite transitions,
 75-658; garnet/therzolite equilibration
 temperatures, 75-2590; Precambrian
 basement and Caledonides, 75-561; ages
 of Precambrian and Palaeozoic rocks, 75-
 1699; contact and fracture ultramafic
 assemblages, 75-2248; granulite facies
 rocks, 75-561; *Almklovdaalen*, eclogites,
 75-2695; *Åmli*, granite, chem., 75-561;
Arendal, high grade metamorphic rocks,
 75-1188; banded migmatite complex,
 75-561; *Bamble*, radioelement variation
 in granite-gneiss, 75-2284; *Bergsdalen*,
 orientation of quart in quartzites, 75-
 752; *Bindal*, scheelite mineralization,
 75-1979; *Dovre fjell*, deformation and
 metamorphism, 75-561; *Farsund*, Rb/Sr
 isochrons for granite plutons, 75-2800;
Finnmark, syn-orogenic igneous alkaline
 rocks, 75-2589; *Godejord* sulphide
 deposit, stromeyerite, and mckinstryite,
 75-2501; *Haugsjåundet* gabbroic sill,
 75-561; *Høy-Gia*, gabbro and diorites,
 trondhjemites, 75-561; *Kalskaret*, vein
 metasomatism in peridotite, 75-1595;
Kauphanger, trondhjemites, 75-561;
Killingdal mine, structural control and
 wall rock alteration, 75-2016; *Kongsberg*,
 armenite, 75-3020; *Lake Savalen*, sul-
 phide and oxide mineralization, 75-561;
Langesundfjord, gibbsite, 75-171; *Larvik*,
 alkali feldspar, 75-2731; *Moss*, crystal-
 lization of simple pegmatites, 75-2591;
Numedal, RE elements in Precambrian
 rocks, 75-3323; Quaternary clays, min.
 and geochem., 75-1846; *Oppland*, gneis-
 ses, 75-561; *Oslo*, barium feldspars, 75-
 3516; Lower Palaeozoic sediments, 75-
 2265; *Rogaland*, metamorphic and mag-
 matic dating, 75-561; *Røros*, chromian-
 ugradinite garnets, 75-2400; *Sør-Trønd-*
elag, *Agdenes-Hemnefjord*, geol. map
 description, 75-2694; *Sulitjelma*, geol.
 setting of ore bodies, 75-929; *Telemark*,
 chem. and geol. of rock suite, 75-561;
Tellnes, baddeleyite, 75-2477; *Troms*,
 sagvandites, petrogen., 75-1467; meta-
 morphism and tectonic events, 75-3823,
 3824; *Trondheim*, metamorphic series,
 75-561; *Tuddal*, acid metavolcanic rocks,
 75-561; *Tustna*, post Caledonian syenite
 porphyry dyke, 75-2561; *Varanger*
Peninsula, braided stream structures, 75-
 1537; *Vegårshei-Gjerstad*, augen gneisses,
 75-561; *Vestspitsbergen*, metamorphism
 in granogabbro, 75-1602
Nova Scotia v. Canada
 Nsutite, *Korea*, 75-978
Nubian desert v. Sudan
 Nuclear magnetic resonance, of Eu-Fe garnet,
 75-2726; oxonium ions in minerals, 75-
 142; silicates and clays, 75-1881; phase
 transition in anorthite, 75-3287, 3288
 Nyerereite, phase relations, 75-1049
 Obsidian, cutting and polishing, 75-21;
Colorado, containing birnessite, 75-1683

- Oceans, ancient, 75-3765; geosynclinal process, 75-3764; deep acoustic stratigraphy, 75-2903 [17]; recovery of minerals, 75-900; minerals from, 75-1956; salts in the sea, 75-1209; source of iron in iron formations, 75-2223; ^{234}Th - ^{238}U disequilibrium, 75-2295; reaction of oceanic crust with seawater, 75-1129; Greece, igneous activity at birth of ocean basin, 75-611; *Pacific Ocean*, tides, 75-697
- Odenwald v. Germany
- Offretite v. zeolite
- Ohio v. USA
- Oil, hydrochem. indicators, 75-405; reserves, and continental drift, 75-906; generation during subsidence of sediments, 75-3370; assay of oil shale, 75-2071; detn. in shales by thermal anal., 75-1777; processing methods, 75-2072-2074; USSR, indicators in sediments, 75-3371; Iraq, migration, Br indicator, 75-1216; Australia, composition and geological environment, 75-1217; Costa Rica, isoprenoids in, 75-407; Arizona, resources, 75-963
- Oklahoma v. USA
- Oligoclase v. feldspar
- Oligoclase-basalt, usage of term, 75-2578
- Olivine, anal. with energy dispersive detector, 75-775; distortion polyhedra, 75-865; Fe^{2+} in M(1) sites, 75-146; valence-bond distributions, 75-1887; pressure effects, 75-3246; Jahn-Teller effects, 75-3142 (II.3); thermal, stress-induced release of CO_2 , 75-2396; crystallization in silicate melts, 75-3240; solubility in basaltic liquids, 75-3176; olivine-spinel transformations in mantle, 75-1008; stability relations with spinel, 75-2131; Fe-Mg partitioning with co-existing clinopyroxene, 75-3142 (I.2); with Ca-free pyroxene, 75-3142 (I.5); stability in assemblage orthopyroxene-olivine-quartz, 75-1050; olivine-clinopyroxene geothermometer, 75-2395; crystal settling in dolerite sill, 75-2575; reaction with plagioclase in metamorphosed dolerite, 75-657; in melilitite, 75-2144; lunar, 75-1254; CIPW norm in lunar lava, 75-1250; in pallasitic meteorites, 75-2389; germanate analogue, elastic props., 75-1012; Ni-Mg olivine, cation ordering, 75-2999; Ni_2SiO_4 , olivine-spinel transformation, 75-2132; structure, 75-1051; Ni_2SiO_4 - NiAl_2O_4 , new orthorhombic phases, 75-275; strong site preference of Co^{2+} , 75-144; Co_2SiO_4 polymorph, 75-145; *Rockall*, 75-2397; *Elba*, from layered extrusion, 75-338; Greece, 75-3726; Poland, from gabbros, 75-341; Russian SFSR, containing mineral inclusions, from kimberlite pipe, 75-437; Rhodesia, olivine-rich lavas, 75-1472; South Africa, compositional variation, 75-2619; New Zealand, 75-3472; Alaska, 75-2572; Arizona, peridot occurrence, 75-2771; California, in picritic, volatile-rich magma, 75-1485; from metamorphosed ultramafic rocks, 75-653; Hawaii, CO_2 inclusions, 75-1285; Washington, anal., 75-517; Labrador, assemblages in adamellite and granodiorite, 75-602; Greenland, trace elements, 75-1161
- , chrysolite, Helen's Reef, 75-2538; Western Australia, in layered intrusion, 75-3705
- , fayalite, geochem. affinity of Co and Cr, 75-1013; Colorado, 75-3711
- , forsterite, synthesis, 75-3248; melting relations, 75-3165, 3166; dissolution in water, 75-3142 (IV.8); charge transfer spectra of Fe^{3+} and Mn^{2+} , 75-1886; in join åkermanite-anorthite-forsterite, 75-2145; Indian Ridge, in serpentinized ultramafic rock, 75-1523
- , knebelite, New South Wales, 75-3112
- Olivine basanite, in synthesis of garnets and ilmenites, 75-3170
- Olympus Mons v. Mars
- OMAN, chromite deposits in ophiolite complex, 75-1993
- Omphacite v. pyroxene
- Ontario v. Canada
- Opal, synthetic white, 75-3317; synthetic, precious, 75-2187; forest, contribution to fine silt and clay fractions of soils, 75-827; Portugal, tridymite and cristobalite in, 75-2458; Russian SFSR, 75-977; Japan, druse in Neogene andesite, 75-121; USA, opaline sediments, 75-638
- Ophiolites and continental margins, 75-2903 [67]; obduction, 75-2903 [68]; serpentinization of ultramafic rocks, 75-3395; Italy, mineralization, 75-933; Greece, petrol., 75-610; supergene alteration, 75-3789; Cyprus, serpentinization, 75-2288; Syria, 75-3671; Oman, chromite deposits, 75-1993; Tasman geosyncline, 75-3771; New South Wales, epidote minerals, in, 75-3463; California, major chem. characteristics, 75-2652
- Oppland v. Norway
- Optic axial angle, calculation accuracy, 75-25
- Optical properties, of terrestrial rocks and glasses, 73-3862
- Orbicular rocks; North Carolina, 75-604
- Orbiculites, Finland, structures of boulders, 75-3617
- Ore microscopy, miniphotometer, 75-1745
- Ore deposits, book, 75-67; grades, 75-3065; pulverization by heating and quenching, 75-1732; inclusions in minerals, 75-918; XRF detn. of Ca, 75-1781; Ni, CuSO_4 , & crude Cu by AAS, 75-1778; Sb by AAS, 75-1764; Au by AAS, 75-1775; polarographic anal. of U, 75-1793; Hungary, Triassic mineralization, 75-1973; Poland, in sediments, 75-1988; USSR, hypogene, K feldspars, 75-1322; South Africa, U-Au sedimentary deposits, 75-1533; precious metal reference sample, 75-3421; Colorado, 75-2006; Montana, 75-1458
- Oregon v. USA
- Organic compounds, catalytic decomposition by clays, 75-811; synthesis in presence of silicate and lime, 75-313; water-soluble, as petroleum source, 75-2297; in sea, terrestrially derived, 75-406; on clay minerals and marine sediments, 75-372; in marine sediments, 75-2276-2278; staining technique, 75-2884; in calcareous sediments and sedimentary rocks, 75-2887; in soils, loss-on-ignition detn., 75-2925; metamorphism, 75-3370; synthesis in Jovian atmosphere, 75-2379; France, diagenesis in Jurassic-Cretaceous formations, 75-370; South Africa, in Precambrian rocks, 75-2205; Japan, in Neogene carbonate rocks, 75-123; Greenland, in Precambrian, 75-3372
- Organic geochem. of Precambrian rocks, 75-1132
- Orissa v. India
- Orpiment, Switzerland, structure refinement, 75-890, 1936; Russian SFSR, 75-2027; Nevada, thallium-bearing, 75-527
- Orthoclase v. feldspar
- Orthogneisses, Czechoslovakia, in Moldanubicum, 75-2709
- Ortholeptynite, origin from zircon appearance, 75-3454
- Orthopyroxene v. pyroxene
- Ortho quartzite, use of term, 75-3774
- Osaka v. Japan
- Oslo v. Norway
- Osmium, detn. in platiniferous media, 75-2875
- Othris Mts. v. Greece
- Ottoshoop v. South Africa
- Outer Hebrides v. Scotland
- Outokumpu v. Finland
- Oxford Co., Maine v. USA
- Oxides, crystal structure data, 75-1809; anhydrous, IR spectra, 75-59
- Oxide-silicate relationships, 75-1966
- Oxygen, microchem. detn. of available oxygen, 75-32; K absorption spectra, 75-2986; source in metasomatism of carbonates, 75-3385; detn. in diamond, 75-1345; atmosphere, age, 75-1121; atmospheric, and Precambrian iron-formations, 75-2222; Russian SFSR, in Archaean atmosphere, 75-2315
- fugacity, in mantle, 75-3142 (I.6); and oxidation state of Eu, 75-2082; magnesio-wüstite calibrant, 75-2101
- isotopes, in aqueous salt solutions, 75-3182; profile in ice, 75-1219; in Precambrian sedimentary carbonates, 75-3389; in coexisting metamorphic calcite and dolomite, 75-384; in feldspars from carbonate rocks, 75-2231; ^{18}O enrichment in ophiolitic metabasic rocks, 75-386; in serpentinization of ultramafic rocks, 75-3395; in carbonaceous chondritic xenolith, 75-427; England, related to ore genesis, 75-2210; Iceland, in basalts, 75-347; Cyprus, in ophiolite serpentinization, 75-2288; Austria, studies on metamorphic rocks, 75-1623; New Zealand, in hydrothermally altered rocks, 75-3329; Pacific Ocean, in altered carbonates, 75-1577; New Caledonia, in metamorphic rocks, 75-1190; Nevada, evidence for meteoric-hydrothermal alteration and ore deposition, 75-2208
- PACIFIC OCEAN, continental margins, 75-2903 [3, 34, 35, 39]; authigenic pyrite in core, 75-1579; authigenic phillipsite formation rate, 75-1568; carbonate solubility, 75-390; calcium and carbonate alkalinity, 75-2309; oxygen & carbon isotopes in altered carbonates, 75-1577; Zn in nodules, 75-2229; manganese concretions and biotic debris, 75-2259; manganese nodules, 75-373; rare earths in ferromanganese nodules, 75-1144; manganese nodules and pelagic deposits, 75-1573; subsurface concentrations, 75-1574; Mn in interstitial water, 75-3406; surface sediments, 75-1578; trace element geochem. of pelagic clay core, 75-1576; element distribution in metalliferous sediments, 75-1176; ocean floor alkalic augite lava, 75-2646; excess-radiation and temperature profiles, 75-2298
- Sr in oceanic profiles, 75-2310; tritium and ^{14}C profiles, 75-2304; ^{226}Ra and Ra-Ba relationships, 75-2308; S, ferromanganese deposits and sediments, 75-1167; N-E, Fe-rich montmorillonite, 75-2951; Aleutian Range-Alaska batholith, chem. variations, 75-333; East Pacific Rise, recent marine sediments, 75-3402;

- PACIFIC OCEAN (contd.)
 and rare-earths in sediments, 75-3369;
 Palaeo-Eocene sill, 75-1506; *Galapagos Is.*,
 em. of tholeiites, 75-2650; liquid
 sulphur in volcanic vents, 75-1507;
Waiaian chain, movement of oceanic
 plate, 75-1511; *Hawaiian Ridge-Emperor*
Mountains, volumes of shield volcanoes,
 75-1505; *Juan de Fuca Ridge*, geol. and
 floor spreading, 75-1520; *Lau basin*,
 pl., 75-2903 [36]; origin of sediments,
 75-356; *Lord Howe Rise*, marine geol.,
 75-2903 [38]; *New Caledonia*, continen-
 tal margin, 75-2903 [37]; serpentine
 minerals, 75-477; hornblendites from
 mafic belt, 75-1308; high-pressure
 rocks, 75-612; mineralogy of meta-
 morphic rocks, 75-462; metamorphic
 rocks, O isotope study, 75-1190;
 peridotite, 75-3502; Lower Tertiary
 tholeiitic basalts, 75-2651; Ni-nontro-
 pite, free energy of formation, 75-2935;
 mineralogy of sheet silicates, 75-3504;
Grace Vela basin and Caroline Ridge,
 basalts from leg 6 of deep-sea drilling
 project, 75-612; *Solomon Is.*, volcano-
 nic mineralization, 75-955; *Timurga*,
 amino-tschermakites, 75-3484; *Van-*
uatu I. Fiji, planetary voltages, ocean
 currents, electrical conductivity, 75-697
Co., *Virginia v. USA*
 identity with vonsenite, 75-1381
 gem discovery, 75-311
 crystallized phases, 75-1689
 STAN, *Hazara*, magnesite occurrence,
 75-3126; *Hazara and Mardan*,
 omite, 75-3127; *Swat*, garnets from
 mblic group, 75-2406; *Warsak*,
 aline rocks, petrol., 75-1451
California v. USA
 o-climates, *Pacific Ocean*, analysis of
 deep-sea sediments, 75-2979
 oecology, *Scotland*, fossils and carbon-
 ate rocks, 75-376
 oenvironment, *South Wales*, limestone,
 i/Al ratio index, 75-379; Carboniferous
 nales in coalfield, 75-355
 omagnetism, *n. England*, Carboniferous
 mestone, 75-3892; *Ireland*, Ordovician
 ndesites, 75-3868; *Canary Is.*, 75-2831;
Worocco, of Missi norite, 75-3872; *India*,
 if Newer Dolerites, 75-1669; expanding
 earth hypothesis, 75-692; *Alaska*, of
 urassic rocks, 75-1668; *Montana*, of
 oulder batholith, 75-3876; *Canadian*
 ield, of dolerites, 75-1667; *Alberta*, in
 elt-Purcell supergroup, 75-3874; *British*
Columbia, volcanic complex, 75-3676;
British Columbia, age and tectonics of
 plutons, 75-1665; ultramafic gabbro
 complex, 75-694; *Ontario*, reversal in
 olcanic group, 75-1670; *Quebec*, of
 northosites, 75-694; *Greenland*, Early
 Tertiary lava flows, 75-3873; *Argentina*,
 of Jurassic formation, 75-1727
 eosalinity, relation with water-soluble
 ations, 75-392; *Germany*, of Holocene
 ediments, 75-1168; *Sweden*, sediments
 criterion, 75-2272
 eosols, *Saskatchewan*, postglacial, 75-846
 eostrain, *Canada*, polycrystalline, pseudo-
 morph indicators, 75-1640
 eotemperatures, *Appalachian Mts.*, of
 carbonate rocks, 75-375
 gonite, *Israel*, mineralogy, 75-838
 tinites, *Germany*, 75-2597
 adium, detn. in (Pd, Pt) (Te, Bi)₂ group,
 75-764; *China*, new Pd-minerals, 75-2529
 compounds, PdPS structure, 75-1929
 Palladoarsenide, *Russian SFSR*, new mineral,
 anal., opt., X-ray, 75-557
 Palygorskite, visible and near-IR absorption
 coefficients, 75-805; palygorskite-sepio-
 lite deposits, 75-115; *France*, high Fe,
 DTA, 75-2954; *Portugal*, anal., 75-2442;
USSR, from Jurassic sediments, 75-2956;
 soils in Lower Triassic of *Moscow syn-*
cline, 75-117; *Australia*, pedogenic, 75-
 134; *California*, 75-2441; *Pennsylvania*,
 in calcite veins, 75-2983
 Panspermia, directed, 75-3899
 Pantellerite, *Ethiopia*, basalt-pantellerite
 sequence, 75-3730; *Queensland*, holo-
 crystalline, 75-3674
 PAPUA NEW GUINEA, molybdenite poly-
 types, 75-1364; imogolite, 75-839;
 Quaternary volcanic rocks, Sr isotope
 study, 75-2242; *New Britain*, *Cape*
Hoskins volcanoes, petrog. & geochem.,
 75-1455; *Talasea*, iron sulphide forma-
 tion, 75-2039; *St. Andrew Strait*, vol-
 canoes and rocks, 75-1524
 Paracelsian, structure type, 75-1949
 Paramagnetic centres, in feldspars, 75-490
 Paramagnetic resonance, gamma-ray irradi-
 ated α -quartz, 75-3855
 Pararammsbergite, first *USSR* find, anal.,
 opt., 75-529
 Paratacamite, *Western Australia*, 75-3886
 Pattern recognition and geochem. data, 75-
 760
 Paulovite, *Russian SFSR*, new mineral, anal.,
 opt., X-ray, 75-558
 Pearceite, *Switzerland*, -polybasite, 75-3104;
New Zealand, 75-2038
 Pearls, effect of gamma rays, 75-1056, 1097
 Peat, experimental formation of hydro-
 carbons, 75-260; *Arizona*, plant tissue
 preservation, 75-1594
 Pecoraite, from Wolf Creek meteorite, 75-
 1320
 Pecos Co., *Texas v. USA*
 Pectolite, synthetic Cd-, crystal structure,
 75-149; *Russian SFSR*, in veins in fenites,
 anal., opt., X-ray, 75-464
 Pedology, weathering, and geomorphological
 research, book, 75-56
 Pegmatites, minerals in, 75-2758; sulphides
 and sulphosalts in, 75-2493; beryl-chry-
 soberyl-sillimanite paragenesis, 75-2409;
 rare-metal, orientation of minerals, 75-
 593; geochem. and metallogenic provin-
 ces, 75-326; behaviour of Be during
 weathering, 75-2228; *Ireland*, containing
 red alkali feldspar, 75-1440; *Portugal*,
 containing tourmaline, 75-1136; con-
 taining cassiterite, 75-2018; *Italy*, con-
 taining garnets, 75-1292; containing Li-
 mica, 75-2427; *Germany*, 75-937, 998,
 1443; *Switzerland*, trace elements in
 quartz and feldspars, 75-2211; *Swiss*
Alps, 75-3867; *Norway*, crystallization,
 75-2591; *USSR*, mineralogy and genesis,
 75-1808; *RE*, mineralogy, geochem. and
 genesis, 75-212; *Russian SFSR*, miarolitic,
 6 types, 75-567; horizontal and vertical
 zoning, 75-3697; *SW Africa*, phosphate
 minerals from, 75-2513; *Malagasy Rep.*,
 Cu, Bi, Te-minerals in, 75-2025; *India*,
 Precambrian, 75-1812; zinnwaldite from,
 75-2432; *China*, spodumene, 75-2418;
Mongolia, rare-metal, 75-211; *California*,
 Li-Al micas from, 75-2431; *Brazil*, tin-
 tantallite, 75-233
 Pelagic deposits, *Pacific and Indian Oceans*,
 associated with manganese nodules, 75-
 1573
 Pelitic rocks, high-grade metamorphism and
 partial melting, 75-3818; *Switzerland*,
 mineral assemblages in, 75-1617; *Central*
Alps, metamorphism, 75-1616; *Japan*,
 low-grade progressive metamorphism,
 75-1635
 Penkvilskite, new mineral, *Russian SFSR*,
 anal., opt., X-ray, 75-1394
 Penninite, *Finland*, from shear zone, 75-3488
 Pennsylvania v. USA
 Pentlandite, synthetic and natural assem-
 blages, 75-1038; thermal expansion of
 structure, 75-1939; in system Fe-Ni-S,
 75-3209; argentine, crystal structure,
 75-3034; *Italy*, 75-1360; *Russian SFSR*,
 in pyrrhotite ores, 75-525; *New South*
Wales, 75-3554; *Western Australia*, in
 Ni-sulphide deposit, 75-2495; *Manitoba*,
 argentine-, 75-3556; *Virginia*, 75-2496;
Ontario & Finland, crystal chem., 75-3555
 Periclase, melting relations, 75-3165
 Peridotite, xenoliths in kimberlites, 75-679;
 liquid equilibrium in mineral assemblages,
 75-257; *Scotland*, new igneous texture,
 75-1468; *Spain*, 75-3693; *Italy*, 75-1412;
 velocity anisotropy in, 75-699; *Alps*,
 metamorphism, 75-1611; *Norway*, vein
 metasomatism, 75-1595; gabbro-perido-
 tite massif, 75-787; *USSR*, xenoliths, 75-
 3178; *Russian SFSR*, graphite-bearing
 pyrope-, 75-2256; *Mid-Atlantic Ridge*,
 serpentinized, synthesis of organic
 matter, 75-313; *New Caledonia*, serpen-
 tinization, 75-477
 Peristera I. v. Aegean Sea
 Perlites, *Hungary*, two genetic types, 75-
 2633
 Perovskite, geometrical and structural rela-
 tions, 75-3029; uranium-bearing, 75-
 2255; silicate with perovskite structure,
 75-2140
 Perranporth, *Cornwall v. England*
 Perrierite, synthetic, crystal structure, 75-
 1915
 Perthite v. feldspar
 PERU, guanine & uric acid, new organic
 minerals, 75-553; new mining law, 75-
 927; andesites and shoshonites, Li, Rb,
 Ba, Sr fractionation, 75-348; trace
 elements in calc-alkaline rocks, 75-3360;
Andes, Mesozoic and Cainozoic batho-
 liths, 75-1462; *Caylloma*, silver deposits,
 75-2010; *Chincha Is.*, stercorite, 75-
 1378; *Michiquillay porphyry Cu deposit*,
 75-2046; *Upper Amazon basin*, proper-
 ties of soils, 75-2972
 Petalite, *Africa*, containing cookeite, 75-
 478
 Petrified wood, *South Africa*, 75-704;
Alabama, 75-3890
 Petroleum, resources at continental margins,
 75-2903 [69]; influence of source
 material on composition, 75-408; carbon-
 ate source rocks, 75-3322; water-soluble
 organic cpd. as source, 75-2297; examina-
 tion of kerogen, 75-2668
 Phase, relations books of diagrams, 75-783;
 projections, 75-2075; ternary systems of
 six phases, 75-2078, 3157; ternary sys-
 tems, $n + 3$ phases, 75-2079; transforma-
 tions in metals and silicates, 75-1882
 Phenakite, crystal growth, 75-3242; crystal
 chem., 75-3241; *China*, 75-3108;
Colorado, 75-2765; *Brazil*, in quartz-
 cassiterite veins, 75-967
 Phengite v. mica
 Phenolic aldehydes, indicators of organic
 matter in sea, 75-406
 Phenols, catalytic activity of clays on, 75-
 368

- Phillipsite v. zeolite
 Phlogopite v. mica
 Phonolite, synthetic glass, analytical standard 75-411; *New South Wales*, in salic magmas, 75-3707
 Phosgenite, structure refinement, 75-3051
 Phosinaite, *Russian SFSR*, new mineral, anal., opt., X-ray, 75-2526
 Phosphate rock, XRF detn. of iron, 75-1782; *Egypt*, extraction of phosphoric acid, 75-240
 Phosphates, IR spectra, 75-59; diagenesis, 75-3140; interaction kinetics with calcite, 75-3235; in fossil bone, trace elements, 75-2321; adsorption on imogolite 75-1830; transport in illite due to consolidation, 75-98; release and sorption by soils and sediments, 75-820; adsorption on clay minerals and marine sediments, 75-372; *Spain*, glauconite-carbonate association, 75-3387; *Germany*, 75-2756, *Israel*, cave deposits, 75-3894; *Syria*, calcareous particles, 75-1001; off *SW Africa*, in sediments, 75-362, 1000; *Western Australia*, avian-derived deposits, 75-1002
 Phosphatic dermal granules, 75-3384
 Phosphatic nodules, in marine shelf sediments, ages, 75-2830
 Phosphoferrite, *Germany*, 75-2756
 Phosphophyllite, *Bolivia*, phys. opt., 75-3888
 Phosphoric acid, extraction from *Egyptian* phosphate rock, 75-240
 Phosphorites, analysis for trace vanadium, 75-2879; marine, rare earths in, 75-1144; *Kazakhstan*, cherty rocks in suite, 75-1561; *South Africa*, microstructures, 75-1558; *India*, mineralogy, 75-2514; in *Aravalli* rocks, 75-241
 Phosphorösslerite, isostructural with rösslerite, 75-3057
 Phosphorus, detn. in chromite, 75-2881; in ferrirobinium, ferrotitanium, and niobium ore, 75-1779; *India*, in stromatolitic limestones, anal., 75-360
 Photogeology, *South Africa* in granitic gneiss terrain, 75-2853
 Photometry, detn. of Ca in igneous rocks, 75-1757; V in magnetite, ilmenite, chromite, and igneous rock, 75-1761; P in ferrirobinium, ferrotitanium and niobium ore, 75-1779
 Phthanite, *Kazakhstan*, V-bearing, 75-320; anal., 75-1561
 Phyllites, *Russian SFSR*, photochemistry in various metamorphic zones, 75-1191
 Phyllosilicates, Nb geochem., Nb-Ti and Nb-Zr relations, 75-473; stability in $\text{SiO}_2\text{-Al}_2\text{O}_3\text{-K}_2\text{O-H}_2\text{O}$ system, 75-295
 Physical geology, book, 75-1799
 Phytoclasts, coalified and graphitized, phys. props., 75-3846
 Picrites, *Rhodesia*, 75-1472
 Picropharmacolite, *USSR* and *France*, structure by IR spectroscopy, 75-183
 Piemontite, *Germany*, 75-2407; *Poland* and *Greece*, anal., opt., X-ray, 75-2410; *India*, from Mn ore deposit, anal., opt., 75-2411
 Piezoelectric properties, of hydrosodalite, 75-2733
 Pigeonite v. pyroxene
 Pillow lavas, *Mid-Atlantic Ridge*, compositional variation, 75-1516; *Japan*, containing chlorite and saponite, 75-1863
 Pinakiolite, *Sweden*, crystal structure, 75-884
 Pinchite, *Texas*, new mineral, opt., X-ray, 75-3602
 Pindos v. *Greece*
 Piperidine, vermiculite-piperidine complex, structural investigation, 75-111
 Pisolites, *Queensland*, in bauxite deposits, 75-215
 Pitchblende v. uraninite
 Placer deposits, *Russian SFSR*, rich alluvial diamond placers, 75-244; *Baltic Sea*, submerged, mode of occurrence, 75-204; *Alaska*, 75-220
 Plagioclase v. feldspar
 Plagiogneisses, *USSR*, K/Ar ages, 75-7
 Plagionite, *Germany*, crystal structure, 75-1933
 Planets, cores, 75-1694; accretion model, 75-2198; stochastic coalescence model, 75-2200; giant, models, 75-2777; magnetism, 75-2748; *Pacific Ocean*, planetary voltages, 75-697
 Plankton, source of pelagic sediments, 75-3367
 Plant foods, mineral, national policy, 75-902
 Plant tissue, *Antarctica*, preservation in peat deposit, 75-1594
 Plate tectonics, review, 75-2640; hot spring mobility, 75-1511; *Greece*, *Turkey*, *Iran*, related to mineralization, 75-1958
 Platiniridium, *British Columbia*, confirmation as species, 75-3534
 Platinum, genesis of deposits, 75-191; spectrophotometric detn. in (Pd, Pt) (Te, Bi)₂ system, 75-764; *Russian SFSR*, in dunite, 75-1994
 — group metals, geochem., 75-1968; *China*, in skarns and hydrothermal Cu deposits, 75-1998
 — minerals, (Pt, Pd) (Bi, Sb), new mineral, *South Africa*, anal., opt., 75-2533; *China*, new minerals, 75-2522
 —, native, *Russian SFSR*, Pt-Fe series, 75-3533; *British Columbia*, 75-3534
 —, rhodian, *Montana*, new mineral, chem., X-ray, 75-3603
 Pleonaste v. spinel
 Plumbogummite, formation and stability, 75-274
 Plutonic rocks, *Russian SFSR*, calcic amphiboles in, 75-2424; gabbro-peridotite plutons, 75-1309; preplatform and protoplatform stages, 75-3680; *Japan*, alkali feldspars in, 75-492; *New South Wales*, 75-1432; *Antarctica*, K/Ar ages, 75-2828
 POLAND, origin of sulphur deposits, 75-1149; Pb-Zn mineralization in Triassic rocks, 75-940; clay minerals in Poznan series, 75-1849; *Bielice* granitoids and amphibolites, geochem., 75-335, 336; *Carpathians*, Oxfordian and Kimmeridgian deposits, 75-624; *Chocianow*, igneous vein rocks, 75-2567; *Cracovian upland*, Cretaceous continental deposits, 75-1547; *Czestochowa*, sideritic ores, 75-3578; *Goluchowice*, mineralized dolomites, 75-970; *Góry Kaczawskie Mts.*, native gold, 75-2467; baryte deposit, metallogeny, 75-237; *Grodziec mine*, mineralogy of tonstein, 75-2967; *Inowroclaw*, salt-dome, boracite in, 75-3883; *Koziegłowy*, galena-sphalerite in sandstones, 75-941; *Kutno*, Astartian and Kimmeridgian deposits, raw material profile, 75-626; *Leba*, uranium in Cambrian-Ordovician sediments, 75-203; *Lower Silesia*, metallogeny and Sudetic faults, 75-1989; Br and Cl in hydrothermal fluids, 75-331; interstratified kaolinite-smectite, 75-85, 1833; iron in primary kaolins, 75-2950; kaolinitic rocks, 75-2966; sphalerite and chalcocite in quartz vein, 75-2021; titanomagnetites in basaltic formation, 75-3540; *Lublin*, Lower Carboniferous weathered loams, 75-1851; rocks from coal basin, 75-3786; *Miechow trough*, Middle Cretaceous profiles, 75-625; *Myszkow*, Late-Precambrian and Silurian rocks, 75-565; *Nowa Ruda* and *Sleza*, geochem. of gabbro massifs, 75-341; *Pustynia Bledowska*, fulgurite, 75-2455; *Piasczno*, sulphur deposits, isotope studies, 75-2232; *Podlasie Depression*, geochem. of Lr. Ordovician, 75-1171; *Silesian-Cracovian Zn-Pb* deposits, chalcopyrite from, 75-2480; *Stablowice*, baryte concretions in Poznan series clay, 75-837; *Stara Góra*, polymetallic mine deposit, 75-971; *Strzegom*, evaluation kaolin occurrences, 75-196; biotites from granites, 75-472; *Sudeten Mts.*, piemontite, 75-2410; rocks in kaolin substratum, 75-836; *Sudetes basin*, epithermal formations of Slupiec syncline, 75-641; *Swan*, anorthositic intrusive, comp. and magnetic props., 75-693; *Swietokrzyskie Mts.*, ore contents of sediments, 75-198; *Szczecin*, mineral assemblages in Oligocene clays, 75-1850; *Upper Silesia*, minerals formed in alteration of Carboniferous tuff, 75-2957; *West Pomerania*, magmatic alkaline rocks, 75-579; *Wzar Mts.*, Fe-Ti oxide minerals in andesite, 75-2470; *Zawiercie*, metamorphic rock of Caledonian basement, 75-662; Triassic carbonates, 75-2658
 Polarimetry, observations on asteroids, 75-1793
 Polarographic method, anal. of U in ores, 75-1793
 Pollucite-leucite solid solns., stability, 75-3302
 Polybasite, *New Zealand*, 75-2038; *Colorado*, 75-2766; *Greenland*, 75-2497; *Peru*, 75-2010
 Polycrase, gamma-ray spectra, 75-3549
 Polymetal deposits, *USSR*, 75-213
 Polymorphic types of elements, 75-1877
 Polytypes, in initial 3C and 2H structures, 75-1879; relative energy of layer packing, 75-1878; kaolin minerals, 75-1904; *California*, wollastonite, 75-1895
 Polzenites, *Czechoslovakia*, major and trace element anal., 75-337
 Porphyry, homologous, generation under simulated geochem. conditions, 75-1021
 Porphyritic rocks, *Russian SFSR*, K-feldspar in phenocrysts, 75-1324
 Porphyroblasts, textures from pelitic hornfels, 75-645
 PORTUGAL, continental margin, 75-2903 [24]; greisenization of granite, 75-1598
 tourmaline from granites, aplites and pegmatites, 75-1136; gibbsite in soils, 75-1853; glauconites, 75-3506; *NE*, fluid inclusions in chromite, 75-3543; *Alter do Chão*, plutonic basic complex, 75-3663; *Coimbra*, tridymite and cristobalite in opal, 75-2458; *Felgueiras*, pegmatite with cassiterite, 75-2018; *Gandra*, palygorskite, 75-2442; *Lisbon*, age detn. on basaltic complex, 75-1705; *Monchique*, nepheline syenite eruptive massif, 75-3664; *Portel-Vidigueira*, serpentinitized ultramafic rocks, 75-2704
 Potash deposits, chemistry and origin, 75-2065; Rb criterion in genesis, 75-1182; *China*, in salt lake, 75-3128; *New Mexico*, 75-2063
 Potassium, flame photometric detn. in water, 75-397; effect on dissolution of biotite, 75-3272; exchange in biotite, 75-800; release from mica in soils, 75-1843; partitioning between clinopyroxene and liquid, 75-1058; in carbonaceous and

- um (contd.)
- Binary chondrites, 75-431, 1277; in Russian rocks, 75-3327; *Russian SFSR*, Cainozoic basalt, andecite and dacite, 75-352
- Compounds, KCl, neutron diffraction by, 75-186; Debye-Waller coefficient, 75-98; shear elastic constant C_{44} , 75-64; dissolution in H_2O -KCl soln., 75-60; Ba^{2+} impurity, X-ray, 75-185; α , thermal expansion, 75-689; effect of grinding with kaolinite, 75-2938; CO_3 polymorphism, 75-3231; production of potassium permanganate from pyrolusite, 75-1960; $K_4(Si_8O_{18})$, 1911, 1912; acetate complex of loysite, dehydration, 75-99; Rb and distribution in salts, 75-2127; *Russian SFSR*, salts in evaporite beds, 75-2066
- Titrimetric detn. of ferrous iron, 75-33
- Ureite, *Nevada*, scheelite-powellite series, 75-1379
- Proterozoic, chronostratigraphic classification, 75-722; organic geochem., 75-1132
- Contamination, atmospheric, chem. comp., 75-2314; Cl- SO_4 ratios, 75-396
- Trappo v. Italy
- Ureite, transformed from epidote, 75-456; *Czechoslovakia*, in Upper Proterozoic rocks, 75-2706; *Australia*, opt., 75-118; *North America*, 75-1642; *North Carolina*, 75-2769; at diorite-granite contact, 75-652
- Ureite, gauge, manganin wire, 75-1747; high static, measurement, 75-1749; in piston-cylinder apparatus, 75-1750; compression testing of rocks, 75-1753; measurement during diamond synthesis, 75-1748
- Ureite, *China*, taiyite, new variety, anal., opt., X-ray, 75-1352
- Ureite, gemstone, 75-1105; *Ukrainian field*, from metamorphic rocks, anal., opt., X-ray, 75-1386
- Ureite crystals, electron diffraction, 75-1884
- Dolomite v. dolomite
- Ureite, vibrations in minerals, 75-59
- Ureite, magnetic resonance spectra, H_2O and OH in hydrosodalite, 75-874; structural data for chernykhite, 75-1903
- Ureite, anisotropy of physical props., 75-86; *Colorado*, 75-2766
- Ureites, *Sutherland*, 75-587
- Ureite, metamorphism, *Scotland*, folding, 75-3826
- Ureite, *France*, mineralogy, 75-831, 75-61
- Ureite, thermodynamics of formation, 75-3194; *Yemen* and *Aden*, 75-1349
- Ureite, ferropseudobrookite, equilibria in system Fe-Ti-O, 75-261
- Ureite, polymorph of stewartite, 75-945, 3056
- Ureite, metamorphs, *Canada*, polycrystalline, indicators of palaeostress, 75-1640
- Ureite, *Germany*, second occurrence, 75-1305
- Ureite, review and theory of origin, 75-587
- Ureite, *Western Australia*, 75-3886
- Ureite Hills, *California* v. USA
- Ureite, RICO, hydrothermal alteration of porphyry Cu deposits, 75-3097
- Ureite, *Russian SFSR*, quartz phenocrysts in, 75-2453; *Japan*, clay minerals formed from, 75-1872
- Ureite, crystal chem. and nomenclature, 75-3464; transformed from epidote, 75-586; *North America*, X-ray, 75-1642; *Czechoslovakia*, in Upper Proterozoic basalts, 75-2706
- Puolanka v. Finland
- Pyrrargyrite, anisotropy of physical props., 75-686; *Germany*, 75-934; *New Zealand*, 75-2038; *Colorado*, 75-2766; *Peru*, 75-2010
- Pyrite, DTA, 75-526; zoning and cobalt content, 75-1354; cobalt content related to metamorphic grade, 75-523; assimilation of gold, 75-3212; thermal release of Hg, 75-2490; in system Fe-Ni-S, 75-3209; types in bauxites, 75-2484; of biogenic origin, 75-1356; *Wales*, 75-932; *Sutherland*, 75-930; *Ireland*, Hg determination, 75-765; *France*, framboidal pyrite, 75-3558; *Germany*, 75-934, 937, 2755; *Switzerland*, mineralization, 75-3104; *Swiss Alps*, framboidal, in concretions, 75-2487; *Greece*, 75-2022; *Turkey*, 75-972, 973, 1990; *Norway*, 75-561, 2016; *Norwegian Caledonides*, 75-929; *Poland*, in epigenetic formation, 75-641; *USSR*, 75-205, 947; associated with high gold concentrations, 75-210; classification with laser microprobe, 75-1355; *Russian SFSR*, 75-2027; Au content, 75-2219; mineralogy of ore, 75-977; *Zaire*, 75-975; *India*, mineralization, 75-229; in slates, 75-2486; from Pb-Zn deposits, 75-2028; *Indian Ocean*, from nannoplankton ooze, 75-2483; *Bangladesh*, polyframboidal, in beach sand deposit, 75-2485; *Japan*, in Permian Toyoma formation, 75-522; *Australia*, 75-1143; *Queensland*, 75-219; *Western Australia*, Ni content, 75-2495; *New Zealand*, 75-1362, 2038; in hot spring deposit, 75-2488; *Pacific Ocean*, authigenic, distribution and SEM study of core, 75-1579; *New Britain*, in exhalative-sedimentary environment, 75-2039; *Solomon Is.*, 75-955; *Kansas*, 75-1591; *Missouri*, framboidal, 75-987; *Virginia*, 75-2496; mining, 75-959; *Wyoming*, divided structure, 75-1890; *Canada*, 75-221
- Pyrite, framboids, synthesis, 75-1036
- Pyroaurite, *Western Australia*, 75-3886
- Pyrochlore, geothermometer, 75-2330; *USSR*, plumbian, 75-212
- Pyroclastic rocks, *Indian Ocean*, basaltic, 75-2648; *Japan*, zeolitic zoning, 75-502; subaqueous, texture and flow mechanism, 75-3734; *West Indies*, geochem. of succession, 75-3759
- Pyrolite, in synthesis of garnets and ilmenites, 75-3170
- Pyrolusite, production of potassium permanganate from, 75-1960; *Korea*, 75-978
- Pyrometasmatism, use of term, 75-3067
- Pyromorphite, formation and stability, 75-274
- Pyrope v. garnet
- Pyrophyllite, hydrothermal synthesis, X-ray, 75-293; stability and thermodynamic props., 75-3276; solid solutions, 75-3277; hydroxyl orientation, 75-869; in formation of β -spodumene, 75-2152; *New Caledonia*, 75-3504
- Pyroxene, inversion and exsolution, phase equilibria, 75-287; pyroxene-spinel symplectite, 75-288; pyroxene-garnet transformations in mantle, 75-1008; coexisting Mg, Fe^{2+} site occupancies, 75-1303; coexisting, Mn distribution, 75-1304; obscuring exsolution lamellae, 75-1730; coexisting with H_2O -undersaturated liquid, 75-2148; Fe^{2+} , Fe^{3+} from electron probe, 75-2412; Jahn-Teller effects, 75-3142 (II.3); partial solution of multicomponent equilibria, 75-3142 (I.3); visible and near-IR diffuse reflectance spectra, 75-2728; alkaline series, optical study, 75-3475; structures of synthetic $ZnSiO_3$ and $ZnMgSi_2O_6$, 75-3010; Al-Ti-rich, in Allende meteorite, 75-2384; in lunar and terrestrial anorthosites, 75-418; Ca-free, Fe-Mg exchange equilibrium with olivine, 75-3142 (I.5); Ca-poor, stability field, 75-2146; Ca-rich, high pressure, 75-284; Ca Tschermak's pyroxene, structure and crystal chem., 75-148; *Aberdeenshire*, in weathered gabbro, 75-828; *Perthshire*, phenocrysts in sandstone, 75-3684; *Elba*, from layered extrusion, 75-338; *Greece*, 75-3726; *Austria*, 75-1682; *Norway*, in granogabbro, 75-1602; from eclogites, 75-2695; *Czechoslovakia*, in spheroidal gabbro, 75-3473; *Poland*, from gabbros, 75-341; *South Africa*, compositional variation, 75-2619; *India*, from tholeiitic basalt, 75-648; *New South Wales*, in garnet pyroxenite, 75-572; from granulites, geothermometry, 75-3469; *Western Australia*, geochem., 75-1302; *New Zealand*, xenoliths in carbonatitic diatreme, 75-3472; *Pacific Ocean*, from deep-sea basalts, 75-612; *New Caledonia*, from blueschists, major element partitioning, 75-462; *Arizona*, 75-3712; *Hawaii*, from volcanoes, 75-3470; *Minnesota*, in contact-metamorphosed rock, 75-2687; *Labrador*, assemblages in adamellite and granodiorite, 75-602; *Bering Sea*, on continental shelf, 75-3802; *Greenland*, crystallization trends, 75-3471; trace elements, 75-1161
- Pyroxene, acmite, titan-acmite, phase relations, 75-285; role in eclogitic assemblages, 75-1007
- Pyroxene, aegirine, *Russian SFSR*, fibrous, 75-1394; in veins in fenites, anal., opt., X-ray, 75-464; *India*, coexisting with magnesioriebeckite, anal., 75-465
- Pyroxene, augite, synth., coexisting with hypersthene, 75-2147; pigeonite exsolution lamellae in, 75-2417; *Scotland*, Fe-rich, electron petrography, 75-461; *Mt. Etna*, calcic, sector and oscillatory zoning, 75-1299; *California*, 75-1485; *North Carolina*, in orbicular rocks, 75-604
- Pyroxene, bronzite, lunar, 75-1254; from lunar rock, anal., X-ray, 75-2343; *Western Australia*, in layered intrusion, 75-3705; *New Caledonia*, 75-1308
- Pyroxene, clinohypersthene, high temp. crystal chem., 75-1057
- Pyroxene, clinopyroxenes, distortion polyhedra, 75-865; phase transition, 75-1057; role in eclogitic assemblages, 75-1007; Ca-Mg partitioning with coexisting olivine, 75-3142 (I.2); olivine-clinopyroxene geothermometer, 75-2395; Fe-Mg partitioning with garnet, 75-2136, 2399; partitioning of K, Rb, Cs, Sr and Ba with matrix, 75-1137; Eu and Sr distribution in clinopyroxene-liquid equilibria, 75-1159; *Rockall*, 75-2397; *Helen's Reef*, 75-2538; *Canary Is.*, in mafic and ultramafic rocks, 75-2414; *France*, 75-1604; *Italy*, from eclogite, 75-2701; aluminous, 75-2416; *Germany*, 75-1628; *Russian SFSR*, Cr-rich, from kimberlites, 75-3474; *Rhodesia*, in basalts, 75-1472; *India*, in feldspathic rocks, anal., 75-463; *Indian Ridge*, in serpentinized ultramafic rock, 75-1523; *Malaysia*, in pyroxenites, 75-2715; *Australia*, from xenoliths in basaltic pipes, 75-258; *Western Australia*, in layered intrusion, 75-3705; *Alaska*, 75-2572; *Hawaii*, K, Rb, Cs, Sr and Ba

- Pyroxene (*contd.*)
 partitioning with liquid, 75-1058; *Minnesota*, from Keweenaw lavas, 75-2415; *Brazil*, 75-677
 —, diopside, synthesis, 75-3248; Sr and RE distribution, 75-2149; atomic vibrations and thermal expansion, 75-864; Ni, high pressure stability, 75-3256; structure type, 75-1949; Gd in system diopside-aqueous vapour, 75-286; lunar, 75-1254; veins in lunar rock, 75-1243; chrome-, opt., 75-1090; absorption spectra, 75-2727; *Czechoslovakia*, anal., X-ray, 75-2020
 —, enstatite, stability with phlogopite, 75-3271; enstatite-diopside solvus, 75-3168; exsolution lamellae, 75-2413; orthoclinic inversion, shear stress, 75-282; polymorphic transitions, 75-283; *Norway*, 75-1595; *Tanzania*, green, opt., 75-1089; *Indian ridge*, in serpentinized ultramafic rock, 75-1523
 —, fassaite, formation, 75-2138
 —, hedenbergite, phase relations, X-ray, 75-2137; alteration, 75-2150; *New South Wales*, 75-3112; *Colorado*, 75-3711
 —, hypersthene, synth., coexisting with augite, 75-2147; spectral reflectance, 75-684; in coronas of metamorphosed dolerite, 75-657; *India*, in granulite, 75-1633; in gneisses, Ag content, 75-2218; *Venezuela*, in gneisses, 75-675
 —, jadeite, coloured by gamma radiation, 75-1097; *Burma*, lavender, optical spectrum, 75-1300; *California*, in metagreywackes, 75-1646
 —, omphacite, *Russian SFSR*, from metasomatites, 75-1301
 —, orthopyroxene, oxidation using thermogravimetry, 75-3255; Fe-rich orthopyroxene-olivine-quartz stability, 75-1050; coexisting with garnet, alumina solubility, 75-281; low-Ca, lamellar structures, 75-863; *Germany*, 75-1628; *Russian SFSR*, from granulites, crystal chem., 75-1893; *Rhodesia*, in basalts, 75-1472; *Australia*, from xenoliths in basaltic pipes, 75-258; *Western Australia*, aluminous, from granulites, 75-1298; *California*, 75-1485; from metamorphosed ultramafic rocks, 75-653; *Quebec*, changes across isograd, 75-3847; *Venezuela*, in gneisses, 75-675
 —, pigeonite, Fe-free, crystallization at atmospheric pressure, 75-3257; exsolution lamellae in metamorphic augite, 75-2417; lunar, antiphase domains, 75-1894; structure, refinement, 75-866; *Scotland*, electron petrography, 75-461
 —, spodumene, hydrothermal synthesis, 75-2151; coloured by gamma radiation, 75-1097; orientation in pegmatites, 75-593; γ - and β -, stability and structure, 75-1909; β -, formation in solid state, 75-2152; *Rhodesia*, from pegmatites, 75-3477; *Mozambique*, alteration, 75-2419; *Afghanistan*, gem, opt., 75-1095; absorption and luminescence spectra, 75-3476; *China*, in pegmatite, anal., 75-2418
 Pyroxenite, *Fife*, inclusions in basanite, 75-1438; *USSR*, xenoliths, 75-3178; *South Africa*, nodules from kimberlite, 75-2611; *Malaysia*, garnet-, 75-2715; *Australia*, garnet-, geochem. and high pressure studies, 75-258; *Hawaii*, garnet-, 75-1477
 Pyroxenoids, Ca-Fe, synth., Mössbauer spectra, 75-1896
 Pyroxferroite, lunar, Mössbauer spectra, 75-1896
 Pyroxmangite, *New South Wales*, opt., 75-1092, 1093
 Pyrrhotite, detn. by X-rays, 75-524; DTA, 75-526; experimental deformation, 75-1034; shock compression, 75-1028; textural study, 75-1358; electron imaging of superstructures, 75-1930; *Norway*, 75-561; *USSR*, 75-205; *Russian SFSR*, in ores, 75-525; *India*, mineralization, 75-229; in basic granulites, 75-230; *Japan*, superstructure and nonstoichiometry, 75-3033; *New Zealand*, 75-1362; *New York*, 75-3312; *Virginia*, mining, 75-959, 2496; *New Brunswick*, hexagonal, 75-2041
 Quartz, variables and crystal growth, 75-2174; sphericity of grains, 75-499; minimal reflectivity angle, 75-2738; oxygen K absorption spectra, 75-2986; irradiated, 75-1100; coloured by gamma radiation, 75-1097; defects in coloured varieties, 75-1331; atomic vibrations and thermal expansion, 75-864; deformation lamellae, 75-2456; glassy inclusions, 75-1336; internal energy increase by grinding, 75-3294; grain surface textures, electron microscopy, 75-2454; etching and surface layer features, 75-298; recrystallization and texture development, 75-1339; exoscopy and endoscopy, 75-1335; water weakening, 75-3293; synthetic, iron colour centres, 75-498, 3519; crushed, gas adsorption, 75-1738; asymmetric adsorption of alanine, 75-1687; He and Ar isotopes in microinclusions, 75-1138; trace elements, neutron activation anal., 75-1787; Al content as geothermometer, 75-2452; influence of grain coatings, 75-2653; silica overgrowth on Triassic sand grains, 75-3775; distinction between secondary and detrital, 75-2867; diagenesis in sandstones, 75-2654; thermoluminescence in Sn-W and Pb-Zn lodes, 75-3075; solubility in borate buffer solns., 75-1070; Mg ion concentration in aqueous solns., 75-1014; in atmospheric powder from ceramic industries, 75-751; reaction with calcite, 75-3259; andradite-quartz stability relations, 75-1053; from biotite granite, 75-332; stability with muscovite, 75-3268; system orthopyroxene-olivine-quartz, 75-1050; quartz-coesite transition, 75-2173; effect of shear, 75-3296; high-, study of atomic ordering, 75-3297; solid solns., stability and structure, 75-1909; high-low transition, DTA, 75-3291, 3292; α -, elastic constants, 75-3854; gamma irradiated, PMR and optical absorption, 75-3855; ESR spectrum of Fe^{3+} , 75-1908; Fe^{2+} and Fe^{3+} in, 75-498; associated with biogenic opal, 75-827; α - β , thermodynamic stability, 75-2172; *Cornwall*, veins in deformed greywacke, 75-388; *Scotland*, chem. and economic aspects, 75-1980; defect structures, 75-3827; *France*, in antimony veins, 75-925; *Belgium*, surface textures of deposited grains, 75-1540; *Spain*, in sedimentary facies, 75-3460; *Italy*, glassy inclusions, 75-1333; thermoluminescence of veins, 75-1648; *Germany*, 75-2407; four generations, 75-1332; *Alps*, fluid inclusions, 75-1330; *Switzerland*, inclusions on *r-l* twins, 75-1672; pegmatitic trace elements, 75-2211; *Norway*, orientation in quartzite, 75-752; *Poland*, petrog. of quartz-sulphide veins, 75-2021; *USSR*, He and Ar isotope content, 75-317; *Russian SFSR*, in strain zones, 75-680; in pumice, 75-2453; origin of crystals, 75-3518; *Ukrainian SSR*, in zoned chert concretions, 75-3792; *North Atlantic*, particle-sizes in deep-sea sediments, 75-3793; *Israel*, surface texture by SEM, 75-2663; in soils of basaltic origin, 75-1857
 Egypt, inclusions in, 75-2455; *Libya*, sandstone from Cretaceous, 75-614; *South Africa*, paramorph after tridymite, 75-2686; *Malagasy Rep.*, in granodiorite, 75-1445; *India*, quartz-dolerite dykes, petrol. and petrochem., 75-2570; *Japan*, diffusion coronas around xenocrysts, 75-3704; *Korea*, fluid inclusions, 75-979; *Australia*, dislocations and bubbles in vein quartz, 75-924; *Colorado*, 75-2765, 2766; *Florida*, microtextures with SEM, 75-2671; *Georgia*, amethyst, smoky, agate, jasper, 75-310; *Minnesota*, multiple overgrowths on sand grains, 75-3520; *Nevada*, O isotope ratios, 75-2208; *New Hampshire*, smoky, 75-2762; *North Carolina*, in orbicular rocks, 75-604; *South Carolina*, embayed grains in soils, 75-2670; *Virginia*, in deformed supracrustal assemblage, 75-674; *Labrador*, assemblages in adamellite and granodiorite, 75-602; *Mexico*, on mordenite fibre, 75-3523; *Brazil*, containing boulderite inclusions, 75-1338; greenish-yellow, effect of gamma rays, 75-1056; *Surinam*, in mesoperthite gneiss, 75-455
 —, diorite, melting at grain boundaries, 75-1016; *Sardinia*, 75-2566
 —, syenite, *Colorado*, 75-3711
 Quartzites, *Scotland*, folding, 75-3826; quartz defect structures, 75-3827; *Swiss Alps*, 75-3867; *Norway*, 75-561; orientation of quartz, 75-752; *Czechoslovakia*, containing celsian, 75-3517; *India*, heavy minerals in, 75-2664; *Korea*, 75-571; *Australia*, geochron., 75-733; *Wyoming*, Au-bearing, 75-961
 Quaternary systems, parallel projection, 75-2076
Quebec v. Canada
Queensland v. Australia
 Quenstedtite, *Chile*, crystal structure, 75-175
 Quercetin ($\text{C}_{15}\text{H}_{10}\text{O}_7$), in synthesis of kaolin, 75-296
 Radioactive elements, *Norway*, in granite-gneiss, 75-2284; *Hawaii*, behaviour of radioisotopes in active volcanism, 75-1156; *California*, in sandstones and clay, 75-374; *Columbia R.*, sediments, phys., chem., mineral characteristics, 75-357; *Poland*, in Cambrian-Ordovician sediments, 75-203; disposal of solids in salt, 75-3896
 Radioisotope X-ray analysis, rapid control assays, 75-2896
 Radiometry, detn. of U, 75-2899
 Radium, ^{226}Ra intercalibration measurements, 75-2307; *Antarctic and Pacific Oceans*, ^{226}Ra profiles, 75-2308; *Canada*, geochem., 75-2323
 Radon, gas in soil particles, 75-2317; *Pacific Ocean*, excess, in sediments and seawater, 75-2298
 Raite, *Russian SFSR*, 75-1394
Rajasthan v. India
 Raman spectra, of minerals, 75-59; hydroxyapatite, 75-3054; scattering study of ZrO_2 , 75-2104; zirconia polymorphs, 75-3022
 Rammelsbergite, *Czechoslovakia*, 75-2503
 Rankinite, synthesis, 75-1060; *Texas*, in skarn, 75-644
 Rare-earth elements, in sedimentary cycle,

- earth elements (*contd.*)
 3362; anomalies in sedimentary
 rocks, 75-3363; in fluorite, 75-2214;
 distribution between diopside and silicate
 anal., 75-2149; neutron-activation anal.
 Ultramafic rocks, 75-38; distribution
 volcanic rocks from Archaean green-
 ne belts, 75-345; in ferromanganese
 nodules, 75-1144; in carbonaceous and
 primary chondrites, 75-431; in Allende
 meteorite, 75-3442; *Austria*, in carbon-
 ates and gneisses, 75-2286; *Norway*, dis-
 tribution in Precambrian rocks, 75-3323;
 basic and ultrabasic rocks, 75-3361;
 and, in basalts from volcanic erup-
 tions, 75-1155; *USSR*, pegmatites, mi-
 neralogy, geochem. and genesis, 75-
 327; *Japan*, in granitic complex, 75-327;
 Pacific Ocean, in sediments, 75-3369;
 Puerto Rico trench, geochem. of basalts
 and serpentinite, 75-1526; *Idaho*, in
 uranium veins, 75-2215
 minerals, potential geothermometers,
 75-2330
 phases v. noble gases
 75-IV, *Switzerland*, twinned crystals,
 75-2500
 Shourne, *Queensland* v. *Australia*
 Arizona v. *USA*
 structure comparison, 75-1937; low
 mercury concentrations, 75-3035;
Switzerland, structure refinement, 75-
 1936; *Russian SFSR*, 75-2027
 site, electron diffraction study and
 isotypism, 75-3014; oxygen K absorp-
 tion spectra, 75-2986; rehydration and
 hydroxylation props., 75-89
 Arizona v. *USA*
 EA, geological background, 75-2903
 [5]; submarine mineralization, 75-1955;
 thermal deposits, 75-942; geochem.
 petrog. of evaporites, 75-1566;
 Discovery Deep, strontium in core, 75-
 1561; *Gulf of Aden*, manganese encrusta-
 tions, 75-1567
 ndite, *Cape Verde I.*, in phosphatic
 rock, 75-2517
 ence samples for Earth sciences, 75-
 1222; trace element data, 75-1223
 tance data, pyrrhotite, 75-1358; hy-
 drasthene, labradorite, and ilmenite mix-
 tures, 75-684; pyroxenes, visible and
 far-IR, 75-2728; *India*, iron ores, 75-516
 ctive indices, of compounds with neon-
 type ionic structures, 75-688
 ctometer, electronic, 75-3320
 , in soils, 75-2907 (6)
 tivity, magnetometric, application to
 ult mapping, 75-1658; electrical, varia-
 tions associated with earthquakes, 75-
 557
 te, *Spain*, 75-660
 ion I. v. *Indian Ocean*
 anes Ridge v. *Iceland*
 um, spectrophotometric detn., 75-
 766; distribution between nickel-iron
 ad silicate melts, 75-312; *USA*, *USSR*,
 eposits and availability, 75-910
 DESIA, K/Ar ages of granites, 75-1713;
 odumene from pegmatites, 75-3477;
 anitic rocks of Rhodesian craton, 75-
 508; *Bulawayo*, age of Huntsman lime-
 stone, 75-371; *Copper Queen area*, granite-
 neiss domes, 75-2609; *Fort Victoria*,
 eformation in greenstone belt, 75-2716;
 adziwa batholith, 75-2607; *Mashaba*,
 anites and gneisses, 75-2610; *Nuanetsi*,
 ivine-rich lavas, 75-1472
 ium, platinum, *Montana*, new mineral,
 hem., X-ray, 75-3603
 Rhodochrosite, absorption spectrum, 75-
 1372; *Czechoslovakia*, 75-939; *Korea*,
 75-978
 Rhodonite, absorption spectrum, 75-1897;
 iron distribution, Mössbauer spectra, 75-
 1898; *New South Wales*, 75-3112; trans-
 parent, opt., 75-1091-1093
 Rhodostannite, synthesis and structure, 75-
 3217
 Rhomboclase, crystal structure, 75-3045
 Rhönite, structure, 75-875; order-disorder,
 75-150; related to krinovite, 75-1899
 Rhum v. *Scotland*
 Rhyodacite, *Hawaii*, solubility of S in melt,
 75-254
 Rhyolite, *Wales*, extrusive dome, 75-1490;
Sardinia, Sr isotopes, 75-1158; *Turkey*,
 albite, 75-972; *Norway*, 75-561; *South*
Africa, lava flows, 75-3703; *Queensland*,
 andesite-rhyolite association, 75-600;
Nova Scotia, age detn., 75-739; *Brazil*
 potassium-rich, 75-2239
 Richterite v. amphibole
 Riebeckite v. amphibole
 Riley Co., *Kansas* v. *USA*
 Ring complexes, *Arabia*, mechanism of
 formation, 75-1497
 — dykes, *Russian SFSR*, of *Tunguska*
 syncline, 75-595
 Rinneite, *Russian SFSR*, regional extent,
 75-3588
 Rio de Janeiro v. *Brazil*
 Riyadh v. *Saudi Arabia*
 Road surface aggregates, geol. and mech.
 props., 75-993
 Robinsonite, synthesis, 75-3210
 Rockall v. *Atlantic Ocean*
 Rockingham Co., *Virginia* v. *USA*
 Rocks, minerals, and crystals, book, 75-58;
 three-dimensional classification, 75-2535
 chemical analysis methods, book, 75-2908
 Rocky Mts. v. *North America*
 Rodingites, *Mid-Atlantic ridge*, petrol. and
 geotectonics, 75-3769
 Rogaland v. *Norway*
 ROMANIA, geomagnetic reversals in Plio-
 cene volcanic rock, 75-1710
 Roquesite, *Kazakhstan*, anal., 75-1359
 Rosasite, glaukosphaerite, Ni analogue, 75-
 552
 Rosenbuschite, titan-, *Russian SFSR*, in
 nepheline syenite, anal., opt., X-ray, 75-
 460
 Rosickýite, 75-162
 Ross v. *Scotland*
 Rösslerite, isostructural with phosphorösler-
 ite, 75-3057
 Routhierite, new mineral, *France*, anal., opt.,
 X-ray, 75-1395
 Rowan Co., *N. Carolina* v. *USA*
 Rubidium, anal. by AAS, 75-41; neutron-
 activation anal. in ultramafic rocks, 75-
 38; partitioning between clinopyroxene
 and liquid, 75-1058; distribution in
 halite, sylvite, and carnallite, 75-2128;
 distribution in potassium salts, 75-2127;
 geochem. criterion for potash deposit
 genesis, 75-1182; *Peru*, fractionation in
 calc-alkaline rocks, 75-348
 — compounds, Rb Br, thermal expansion,
 75-689; Debye temperature, 75-691;
 halides, Debye-Waller factors, 75-3063
 Ruby, opt., 75-2183; *Yugoslavia*, 75-1079;
Tanzania, 75-1082; *Burma*, inclusions,
 75-1078; *USA*, *Georgia*, 75-310; *North*
Carolina, *Shula mine*, 75-2182
 Russell Co., *Texas* v. *USA*
 Russian SFSR v. *USSR*
 Rutheniridosmine, *Russian SFSR*, anal., 75-
 3535
 Rutile, thermal expansion, 75-3860; minimal
 reflectivity angle, 75-2738; spectroscopic
 detn. of V, 75-1762; *Northumberland*, in
 beach sands, 75-931; *Austria*, in Alpine
 rocks, 75-1680; *Russian SFSR*, in leucox-
 ene, 75-1350; *Baltic Sea*, placer deposits,
 75-204; *Sierra Leone*, sedimentary depos-
 its, 75-225; *USA*, *Georgia*, in sediments,
 75-2672; *Newfoundland*, coarse-grained,
 X-ray, 75-3536
 RWANDA, *Gatumba*, andalusite, 75-1890
 Saccharides, 75-2907 (2)
 Safflorite, *Germany*, 75-937, 2755; *Czech-*
oslovakia, 75-2503
 Sagvandites, *Norway*, 75-1467
 Sahara v. *Africa*
 St. Kitts v. *West Indies*
 St. Lawrence R. v. *Canada*
 Salt, deposits, book, 75-1804; in sea, 75-
 1209; gamma-ray logs and origin, 75-
 2059; isopiestic detn. of solubilities, 75-
 3149; O isotope activities in aqueous
 solns., 75-3182; disposal of radioactive
 solids in, 75-3896; free convection mass
 transfer, 75-3131; soln. in horizontal
 fracture system, 75-3132; bedded de-
 posits, hydrocarbons in cavities, 75-3897;
 debris accumulation, 75-3898; cavity
 solution collapse breccia, 75-3782;
 hydrates, crystal structure, 75-177;
Germany, Br content, in Zechstein
 horizon, 75-371; *USSR*, fluid channels,
 75-393; *Utah*, economics, 75-2062;
Mississippi, ridges and wrench faulting,
 75-3137; *Nova Scotia*, basins, 75-3138
 — beds, *Ohio*, Silurian, reserves, 75-996
 — domes, deformation of lava during
 formation, 75-3780; evolution, experi-
 ment and theory, 75-3776; strain pat-
 terns, 75-3777
 Salzburg v. *Austria*
 Samarskite, *India*, metamict, heat treatment,
 anal., 75-521
 Sampleite, *Western Australia*, 75-3886
 Sampling, and subsampling diagrams, 75-
 1120; mineralogical and geological ma-
 terials, 75-62
 Samsonite, *Germany*, crystal structure, anal.,
 75-1934
 San Andreas fault, *California* v. *USA*
 San Bernardino Co., *California* v. *USA*
 San Jose, *California* v. *USA*
 San Juan Mts., *Colorado* v. *USA*
 Sanbagawa v. *Japan*
 Sanbornite, phase relations, 75-3289
 Sand, wet, DTA study, 75-1655; quartzose,
 in prehistoric pottery, 75-1686; deposi-
 tional histories of grains, 75-1534,
 1535; deposits, ergs, 75-1532; *Italy*,
 minerals in, 75-1545; *Black Sea coast*,
 gold in, 75-944; *Atlantic Ocean*, deep-
 sea, petrol. and origin, 75-3795; *India*,
 75-1812; *Bangladesh*, polyframboidal
 pyrite in, 75-2485; *USA*, subaerial
 weathering, 75-3812; *California*, sedi-
 mentary facies, 75-640; from weathering
 of *North Carolina* piedmont, 75-3810;
Greenland, estimation of bedrock com-
 positions, 75-2655
 Sandstone, diagenesis, 75-614; diagenesis of
 quartz in, 75-2654; Cu-bearing, bedding,
 75-908; secondary leaching porosity, 75-
 2977; *Perthshire*, petrol. of lavas, 75-
 3684; *France*, quartz-feldspar sandstone
 from Trias, 75-614; *Germany*, spherical
 or ellipsoidal formation during disintegra-
 tion, 75-1546; *Poland*, Lower Triassic,
 galena-sphalerite mineralization, 75-941;
USSR, saturated with fresh water and oil,

- Sandstone (*contd.*)
 thermal props., 75-2741; *Russian SFSR*, SEM study, 75-2974; *Sudan*, soils derived from, 75-1854; *Nigeria*, soils derived from, 75-2965; *India*, palaeocurrent analysis, 75-1562; sandstone-shale sequence, 75-634; red-spotted, in *New Delhi* architecture, 75-629; *Japan*, tuffaceous, chlorite clay minerals in, 75-1864; *California*, of lone formation, radioelements and trace elements, 75-374; *Virginia*, high-silica resources, 75-992; *Alberta*, relations between rock fabric and joints, 75-1435; *Quebec*, flysch, Lower Palaeozoic, 75-1582
- Sand-washing, treatment of slimes, 75-2855
- Sandy beach facies, 75-1530
- Sanguine test transmissions, 75-721
- Sanidine v. feldspar
- Santa Ana R.*, *California* v. *USA*
- Santa Cruz* v. *Argentina*
- Saponite, weathered phlogopite, 75-3497; Na- & K-, heat treatment and rehydration, 75-1837; *Czechoslovakia*, swelling and structural organization, 75-2940; *Japan*, Fe-rich, with chlorite in pillow lava, 75-1863
- Sapphire, basal dislocations, 75-2468; temperature effect on fracture 75-2736; order-disorder, 75-150
- Sapphirine, crystallization field, 75-1055; high pressure instability, 75-3251; *India*, from anorthosite, 75-454; *Afghanistan*, in kyanite-gedrite-talc schist, 75-3462; *Greenland*, in anorthosite complex, 75-3611; *Surinam*, in mesoperthite gneiss, 75-455
- Sarbai*, *Russian SFSR* v. *USSR*
- Sardinia* v. *Italy*
- Sarkinite, crystal structure, 75-3031
- Saskatchewan* v. *Canada*
- SATURN, albedos and densities of inner satellites, 75-2778
- Sauconite, oxygen K absorption spectra, 75-2986; *Russian SFSR*, DTA, 75-227
- SAUDI ARABIA, regional metamorphism in *Saudi Arabian shield*, 75-3088; seismotectonics of *Arabian Peninsula*, 75-3893; *Riyadh*, Na and K in water, 75-397
- Sauerland* v. *Germany*
- Saussurites, metamorphic stage and geochem. environment, 75-655
- Sazhinite, new mineral, *Russian SFSR*, anal., opt., X-ray, 75-1396
- Scandium, *Mozambique*, in ixiolite, 75-520
- Scapolite, synthesis under magmatic conditions, 75-299; structure of intermediate scapolite-wernerite, 75-3019; Al/Ni distribution, 75-1885; nitrate-, high pressure synthesis and stability, 75-300; *Sweden*, Ca/Na distribution with plagioclase, 75-2450; *New South Wales*, in garnet clinopyroxenite, 75-572
- , meionite, high pressure stability, 75-2180
- Scawtite, *Aberdeenshire*, in Huntley gabbro, 75-700
- Schairerite, *California*, crystal structure related to sulphohalite, 75-3042
- Schaurteite, X-ray powder data, 75-3043
- Scheelite, *France*, in calc-silicate rocks, 75-3083; *Germany*, 75-1985; *China*, 75-3108; *Nevada*, scheelite-powellite series, 75-1379; *North Carolina*, in soapstone deposit, 75-960; *Norway*, mineralization in skarns and gneisses, 75-1979
- Schertelite, synthetic equivalents, 75-177
- Schiller effects, in Na-rich plagioclases, 75-493
- Schists, Cu-bearing, bedding, 75-908; *France*, 75-3628; calcareous, 75-1622; mica-, surface weathering, 75-2975; *Italy*, antigorite-, progressive metamorphism, 75-2700; *Swiss Alps*, 75-3867; *Norway*, 75-561; *Russian SFSR*, graphitoid-kyanite, migration of gold, 75-1192; *India*, anthophyllite, bedded deposit, 75-669; andalusite from, 75-2408; *Afghanistan*, sapphirine from, 75-3462; *Japan*, containing zoned garnet, 75-443; heterogeneity of chlorites, 75-483; *Korea*, chlorite and garnet-biotite, 75-571; *Taiwan*, glaucophane-, petrol., 75-3845; *New Caledonia*, high-pressure, 75-672
- Schizolite, *Russian SFSR*, 75-1396
- Schorl v. tourmaline
- Schreibersite, in mesosiderites, 75-3440; in Morasko iron, opt., 75-1262
- Schuchardtite, *Brazil*, 75-2955
- Scoria deposit, *Iceland*, *Heimaey* volcano, 75-2631
- SCOTLAND, mineral collecting, 75-701; mica resources, 75-2067; boreholes, 75-1401; Tertiary lavas, 75-2588; uranium mineralization, 75-1981; seismic reflection surveys in sea areas, 75-617; palaeoecology and diagenesis of Great Estuarine series, 75-376; stream-sediment sampling, 75-62; Devonian lacustrine limestones, 75-3619; quartzites, 75-3827; Scourie and Inver assemblages, sub-crustal accretion, 75-3399; *Cheviot area*, stream waters and sediments, geochem., 75-3373; *Clyde plateau*, Lower Carboniferous vulcanicity, 75-1439; *Great Glen fault*, timing of granite intrusion 75-1402; pattern of regional metamorphism, 75-1403; *Loch Etive*, iron oolites, 75-1963; *N-W Highlands and Islands*, mineral exploration, 75-1980; *Orkney and Shetland Is.*, geophys., 75-3620; *Sea of Hebrides*, Tertiary sediments, 75-2539; *Shetlands*, talc-magnetite deposit, 75-2068
- , ABERDEENSHIRE, *Binhill quarry*, tacharanite and scawtite in Huntley gabbro, 75-700; *Insh and Bogancloch*, gabbro, deep-weathering, 75-828; *Lochnager* granite ring complex, 75-2903
- , ARGYLLSHIRE, *Ardnamurchan*, Fe-rich augite in innomite pitchstone, 75-461; *Ben Hiant* vent, 75-1488; *Coll and Tiree*, granulite facies rocks, retrogressive metamorphism, 75-1189; *Glencoe*, evolution of cauldron, 75-2594; *Islay*, *Loch Gruinart* fault, offshore extension, 75-3622; *Knapdale*, metabasite amphiboles from Dalradian, 75-1307
- , BUTE, structures in Dalradian Leny grits, 75-2697
- , FIFE, *Coalyard Hill vent*, ultrabasic inclusions, 75-1438
- , INVERNESS, *Hebrides* terrace seamount, geophys., 75-3621; *Outer Hebrides*, grey gneiss complex, age & origin, 75-725; *Lewis*, sedimentation and tectonism, 75-1538; *Raasay*, iron oolites, 75-1963; *Rhum*, poikilo-macro-spherulitic feldspar in peridotite, 75-1468; *Spean Bridge-Roybridge*, P-T estimates for metamorphism in Dalradian, 75-1603
- , KINROSS, *Loch Leven*, premetamorphic and precleavage inversion, 75-3826
- , KIRKCUDBRIGHTSHIRE, *Gatehouse*, Silurian rocks, sedimentology and diagenesis, 75-1405
- , LANARKSHIRE, *Leadhills*, mineral collecting, 75-701
- , PERTSHIRE, *Sidlaw Hills*, petrol. of Lr. Old Red Sandstone, 75-3684
- , ROSSSHIRE, *Beinn Bhreac* fold, 75-1404; *Loch Maree*, ages of Lewisian metasediments and gneisses, 75-1700
- , SUTHERLAND, *Lairg*, molybdenite in Precambrian rocks, 75-930; *Loch Loyal*, syenites, 75-587; *Loch Shin*, 'slide rock' in Moine, 75-3825; *Scourie*, high-temp. shear zones, 75-1596
- Sedimentary cycles, Fourier analysis of geochem. data, 75-1166
- events, *Australia*, related to world-wide Cretaceous transgressions, 75-1426
- formations, *Hungary*, 75-2659
- rocks, detn. of carbonate and organic matter, 75-2887; RE abundances and excess Eu, 75-382; mixed-layer mineral in, 75-1860; distinction between detrital and secondary quartz, 75-2867; *Ireland*, mineralization in Lr. Carboniferous, 75-1983; *Turkey*, 75-2550; *southern Africa*, glaciogenic, 75-3796; *Pennsylvania*, mercury geochem., 75-1177
- Sedimentation, continental shelf, 75-2903 [10]; *France*, estuarine, 75-614; *Mediterranean*, deltaic, 75-614; *Niger delta*, 75-1555; *Georgia*, in *Climax Cave*, 75-744
- Sedimentology, *Manitoba*, of Missi group, 75-1581
- Sediments, continental margin, vibratory coring system, 75-2854; removal of pore waters without air contact, 75-2856; impregnation with polyester resin, 75-2859; particle size anal., 75-2858; calcareous, detn. of carbonate and organic matter, 75-2887; detn. of organic carbon, 75-2886, 2888; staining organic matter, 75-2884; pelagic, plankton source, 75-3367; ferromanganoan, on active oceanic ridges, 75-3368; homoionic, pore structure, 75-3857; terrigenous clastics, 75-614; carbonate, origin of amoeboidal fabric, 75-616; thermoluminescence analysis of Recent cores, 75-1791; pelagic, pH variations and inorganic carbonates, 75-2262; mobilization of metals, 75-2271; recent, dicarboxylic acids in, 75-2275; extraction of amino acids using superheated water, 75-794; chem. detn. of Mo, 75-1765; phosphate release and sorption, 75-820; deep-sea, unreliable ^{14}C dating, 75-1528; diffusion of ions, 75-391; marine, interstitial solutions, 75-2294; organic matter on, 75-372, 2276-2278; ignition and formation of Ca silicates, 75-259; alkalinity of interstitial waters, 75-3403; oceanic, diagenesis, from deep-sea drilling, 75-3761; stream, sampling interstitial waters, 75-1736; *British Isles*, stream, geochem., 75-3373; off *Cornwall*, detn. of tin, 75-2880; Devonian, geochem., 75-3392; *Devon and Cornwall*, geochem., 75-2333; *Devon*, major and trace element anomalies, 75-2334; *Lake District*, lake monocarboxylic acids in, 75-2281; *Lake Windermere*, stable magnetic remanence, 75-2749; *Sea of Hebrides*, 75-2539; *Outer Hebrides*, and tectonism, 75-1538; *North Sea*, containing uranium, 75-200; off *Iceland*, geochem., 75-1552
- France*, littoral benthic structures, 75-1541; *Gulf of Lions*, stable C isotope distribution, 75-2258; *Italy*, Ti, Al, Fe distribution, 75-2269; *Turkey*, saline, alkaline and lacustrine, 75-1549; *Switzerland* and *Germany*, heavy metal accumulation

- ents (contd.)
 lakes, 75-3374; *Sweden*, palaeosalinity, 75-2272; lake, Hg content, 75-2273; *Norway*, geochem., 75-2265; *Poland*, ore contents, 75-1988; *Russian SFSR*, filmy lorite on sandstones, 75-2667; related coal measures, 75-1559; *Baltic Sea*, heavy metal and C isotopes in, 75-366; *Black Sea*, geomagnetic variations, 75-352; Se content, 75-363; Zn content, 75-364; Pb content, 75-365; *Atlantic Ocean*, deep-sea, trace elements, 75-374; *South Atlantic*, geochem. history, 75-3366; *Mid-Atlantic Ridge*, lithogenesis, 75-1517; *Israel*, Palaeozoic, clay mineralogy, 75-1858; Hazeva formation, 75-1715; *Red Sea*, metalliferous, 75-1955; *Egypt*, inclusions in detrital quartz, 75-2455; off SW Africa, phosphate in, 75-1000; *SW African shelf*, phosphate concretions in, 75-362; *India*, eosynclinal, 75-1563; *India*, petrog. and heavy mineral suite, 75-630; *Indian continental shelf*, trace elements, 75-1565; *Anga R.*, tectonic framework, 75-631; *Indian Ocean*, from DSDP leg 26, 75-2260; marine clay, cation absorption, 75-821; thickness and structure, 75-364; clay mineralogy, 75-1569; *Japan*, marine, clay minerals, 75-1867; *China*, trace elements, 75-377; *Antarctica*, deep-sea, clay-mineral changes, 75-2980; *Pacific Ocean*, origin, 75-356; pore-fluids and mineralogy, 75-3402; surface calcium carbonate and gross-size analysis, 75-3578; Au and RE elements in, 75-3369; in concretions and biotic debris, 75-2259; deep-sea, palaeoclimatic events, 75-2979; metalliferous, element distribution, 75-1176; *South Pacific*, elemental accumulation rates, 75-1167; *West Indies*, marine diagenesis, 75-2678; *Gulf of Mexico*, fine-grained, X-ray diffraction, 75-1741; *North America*, humic substance in lake, 75-2280; *USA*, texture on Atlantic continental shelf, 75-1589; estuarine, Upper Wisconsinan-Lr. Holocene, 75-2981; clay distributions, 75-2982; *California*, heavy mineral assemblages in, 75-3811; marine, Hg concentrations, 75-1175; *Colorado*, stream, scavenging of silver, 75-2270; lacustrine, deposits of Br-bearing halite, 75-2283; *Georgia*, heavy minerals in, 75-2672; *North Carolina*, coastal barrier sediments, 75-1593; *Texas*, Holocene and Pleistocene clay mineralogy, 75-1875; *Columbia R.*, radionuclide, content, 75-357; *Canada*, lacustrine, iron compounds in, 75-1172; *SE*, shelf, boron in, 75-358; *Barents Sea*, chem., mineralogy of clay fraction, 75-1169; *Gulf of St. Lawrence*, suspended, distribution and transport, 75-1586; *Great Lakes*, iron phosphates in, 75-1376; *New Brunswick*, stream sediments, 75-413; *N-W Territories*, U content, 75-416; *Ontario*, lacustrine, organic, metal dispersion haloes in, 75-2266; *Lake Ontario*, surficial, 75-1587; *Newfoundland*, geochem., 75-359; *Yukon*, stream, factor analysis, 75-2332
 seismic reflection surveys, *Scotland*, in sea areas, 75-617
 smic spectra, structural parameters and source mechanisms, 75-3653
 smicity, at continental margins, 75-2903 [7]; of multi-layered dipping media, 75-3881; *Bay of Biscay*, 75-3880; *Mediterranean*, 75-1544; *Oregon*, reconnaissance surveys, 75-3743
 Selenides, crystal structure data, 75-1809; *Czechoslovakia*, from uranium deposits, 75-3085
 Selenium, chemistry and technology, book, 75-63; analysis in geologic materials, 75-763; geochemical indicator, 75-2331; AAS detn. on ion-exchange resins, 75-2872; spectrofluorimetric detn. in rocks, 75-770; in sedimentary rocks 75-3365; in metamorphic rocks, 75-3394; in igneous rocks, 75-3349; *Finland*, in sediments, 75-3364; *Black Sea*, in recent sediments, 75-363
 Senarmontite, *Greenland*, 75-1397, 2497
 Separation, using hot Clerici soln., 75-749; magnetic, of weakly magnetic minerals, 75-748
 Sepiolites, thermal analysis, 75-2941; dehydration of bound water, 75-817; structural change and adsorption when heated, 75-1839; structure data from electron diffraction, 75-1905; acid treatment, 75-1841; palygorskite-sepiolite deposits, 75-115; *Ireland*, alleged stevensite, 75-3503; *Korea*, chem., X-ray, 75-125; *New York*, activity-product constant, 75-3275; *Greenland*, ferri-sepiolite, anal., opt., X-ray, 75-2443
 Septarian concretions, pore filling calcite, 75-3574
 Serendibite, related to aenigmatite, X-ray, 75-2420
 Sericite v. mica
 Serpentine, cutting and polishing, 75-21; synthetic, cell vol. and RI variation, 75-3499; *Indian Ridge*, in ultramafic rock, 75-1523; *Western Australia*, Ni-bearing Al-, anal., opt., 75-3500; *New Caledonia*, minerals from ultramafic belt, 75-477; *California*, silica-carbonate alteration, 75-964; *New Mexico*, ricolite, 75-2196 — minerals, hydroxyl-stretching frequencies, 75-3013; *Italy*, IR spectra, 75-2440; *Japan*, 75-485
 Serpentinites, *Mid-Atlantic ridge*, sedimentary, 75-3770; *Russian SFSR*, diamond-bearing pyrope-, 75-1293; *Japan*, 75-670; *New South Wales*, eclogites from, 75-2625; *Puerto Rico trench*, petrol., 75-1525; rare-earth geochem., 75-1526
 Serpentinization, of ultramafic rocks, 75-1193
 Shaba v. Zaire
 Shales, Sr isotopes in, 75-381; water-soluble cations and palaeosalinity, 75-392; Green River, quantitative detn. of dawsonite, 75-2868; oil, detn. of nahcolite and dawsonite, 75-753; detn. of organic hydrogen, 75-1776; detn. of recoverable oil, 75-1777; *Dorset*, oil, spontaneous combustion, 75-1693; *South Wales coal-field*, Carboniferous, palaeoenvironments, 75-355; *Germany*, hydrocarbons in, 75-1186; *Sweden*, alum, U, Mo and V in, 75-3377; *Czechoslovakia*, chem. composition, 75-1178; *India*, sandstone-shale sequence, 75-634; *Japan*, Triassic, interstratified chlorite and vermiculite, 75-1862; *China*, black, vanadium minerals in, 75-2403; *Colorado*, oil, carbonates in, 75-1370; in Green River formation, 75-501; hydrocarbons, 75-1187; *Kansas*, classification, 75-639; *Michigan*, mineralogy and geochem., 75-1150; *Oklahoma*, simulated and natural weathering, 75-139; *Texas*, Graneros, Bentonite Marker bed in, 75-844; *British Columbia*, Lr. Cretaceous, diagenesis of clay minerals, 75-843
 Shear stress, effect on ortho- clino inversion in enstatite, 75-282
 Shetlands v. Scotland
 Shikoku v. Japan
 Shimane Pref. v. Japan
 Shortite, in kimberlite, phase relations, 75-1049
 Shoshonites, *Peru*, Li, Rb, Ba, Sr fractionation, 75-348
 Shoshonitic rocks, *Ontario*, affinities of Archaean rocks, 75-1457
 Siberia, *Russian SFSR* v. *USSR*
 Sicily v. Italy
 Siderite, phase relations, 75-2122; Mössbauer study, 75-3049; stability with silica, 75-3180; *Germany*, in iron ores, 75-936; *Poland*, mineralogy of ores, 75-3578; *Idaho* and *Washington*, vesicular basalt, 75-2760; *Canada*, 75-221
 Siderophile elements, abundance on Earth and Moon, 75-312
 Siegenite, *Switzerland*, 75-3104
 SIERRA LEONE, Bonthe and Moyamba, sedimentary deposits, 75-225
 Sierra Nevada, *California* v. *USA*
 Silcrete, *southern Africa* and *Australia*, and silica diagenesis, 75-3799
 Silesia v. *Czechoslovakia*
 Silica, IR spectra, 75-59; spectrophotometric detn., 75-31; solid soln., TiO₂ in glass, 75-3164; phase relations, 75-3289, 3290; new synthetic phase, X-ray, 75-3295; hydrate, β -H₂SiO₅, synthesis, 75-3299; stability with siderite and ankerite, 75-3180; amorphous, transformation to coesite, 75-2175, 2176; equilibrium solubilities in dilute solutions, 75-2290; in woody stems, 75-500; on sea-floor, state, 75-259; removal from clays, 75-2920; overgrowth on Triassic sand grains, 75-3775; *southern Africa* and *Australia*, diagenesis, 75-3799; *California*, silica-carbonate alteration of serpentine, 75-964; *Georgia*, opaline, in silica nodule, 75-3524; *Virginia*, high-silica resources, 75-992
 Silicates, Al/Si distribution, 75-1885; detn. of ferrous iron, 75-1756; detn. of F and H with ion microprobe, 75-1759; phase transformations, 75-1882; bond angle distortions in tetrahedra, 75-2987; deformation of Si tetrahedra, 75-3009; EPR and NMR techniques, 75-1881; silicate-water systems, 75-1017; geochem. affinity of Co and Ge, 75-1013; synthetic, Cl substitution, 75-3280; oxide-silicate relationships, 75-1966 — framework, refractive indices and tetrahedron volume, 75-1651 — layer, Gibbs energy of formation, 75-1063; crystal structure and crystal chem., 75-1902; cation ordering and pseudosymmetry, 75-3011; alteration of vitroclastic material, 75-480; calibration of long-spacing using long chain alcohols, 75-792 — liquids, magmatic, viscosity model, 75-2088, 3156; immiscibility, 75-2091; iron silicate liquids under reducing conditions, 75-1011; Sr distribution with carbonate liquids, 75-2084 — melts, volatility of oxides, 75-2394; water solubilities, thermodynamic basis, 75-253; crystallization of olivine, 75-3240; — minerals, IR spectra, 75-59; Fe²⁺/Fe³⁺ ratios, 75-2421; structure of monoclinic CaAl₂Si₂O₈, 75-873 — rocks, decomposition and analysis by AAS, 75-769; emission-spectrographic detn. of Cr and V, 75-1796
 Silicification, of calcareous rocks, 75-3788

- Silicon, detn. in diamond, 75-1345; dissolved in fresh waters, 75-1207
— compounds, SiC polytypes, 75-1878; structure and growth, 75-879; SiO₂ in rock standards, 75-1224
- Sillimanite, in amphibolite-facies schists and gneisses, 75-451; schist, staurolite in, 75-1632; paragenesis in pegmatites, 75-2409; *France*, in metamorphic rocks, 75-1605; *Italy*, in gneisses, 75-1606; *Switzerland*, 75-1617; *USA*, *Georgia*, in sediments, 75-2672; *Ontario*, gneisses, 75-2723; *Venezuela*, gneisses, 75-675
- Sills, crystal settling, 75-2575; *Fiji*, essexitic, 75-1506
- Silt, Na illite-silt mixtures, electrolyte concentration-permeability relationships, 75-97
- Silver, trace detn. by AAS, 75-767, 768; Ag⁺ interference in AAS detn. of Hg, 75-1770; detn. in Pb, Cu and Zn concentrates, 75-2882; in pegmatites, 75-2758; *India*, in granitic gneisses, 75-2218; *New Zealand*, mineralization, 75-2038; *Colorado*, 75-2766; in stream sediments, 75-2270
— compounds, Ag₃PbSb₃S₇, new phase, 75-269; synthesis by Zommerlad's method, 75-270; Ag-AgCl buffers, 75-3148; silver iodide, polytypism, 75-190; silver-thiourea complex, adsorption in montmorillonite, 75-806, 807; isothioronium cpds., as liquid-liquid extractants, 75-2872
— deposits, *USSR*, ores containing küstelite, 75-3562; *Australia*, hydrothermal deposit, 75-954; S isotope ratios, 75-1143; *Ontario*, associated chlorites, 75-482; *Peru*, 75-2010
—, native, *Germany*, 75-2755; *Canada*, 75-1148
- Simplon Tunnel v. *Switzerland*
- SINGAPORE, geology, bibliography and index, 75-1805; coastal reclamation, geochem. soil study, 75-133
- Sinhaitite, gem discovery, 75-311; *Tanzania*, opt., 75-1296
- Skaergaard v. *Greenland*
- Skagerrak v. *North Sea*
- Skarn, calcareous, dynamics of formation, 75-2095; *Norway*, scheelite mineralization, 75-1979; *Czechoslovakia*, containing magnetite ore lens, 75-2020; Au content, 75-2287; *Russian SFSR*, magnesian, 75-643; *Texas*, zoned calc-silicate skarn, 75-644
- Skinerite, new mineral, *Greenland*, X-ray, 75-1397, 2497
- Skutterudite, *Czechoslovakia*, 75-2503
- Slate-phyllite formations, *India*, 75-1812
- Slates, *India*, ambient pyrite grains in, 75-2486
- Slavikite, *Argentina*, crystal structure, 75-3044
- Sleza v. *Poland*
- Smectites, order-disorder relations, 75-1825; in weathered Oxford clay, 75-829; ESR spectra of Mn²⁺, 75-1819; interlamellar adsorption of CO₂, 75-84; oxidative power measured by hydroquinone, 75-109; fine grained, lath-shaped units in, 75-1828; *Poland*, interstratified with kaolinite, 75-85, 1833
- Smithsonite, *New South Wales*, high Mg-, chem., opt., X-ray, 75-3579
- Smith-Topley effect, detection, 75-3150
- Smythite, *Western Australia*, Ni-, in Ni-sulphide ore deposit, 75-2495
- Soapstone, *Germany*, deposits, 75-994; *Sweden*, Ni-bearing magnetite from, 75-2472; *North Carolina*, containing scheelite, 75-960; *Virginia*, artifacts, 75-3326
- Sodalite, cathodochromic, synthesis, 75-3306; thermal decomposition, 75-3305
—, hydrosodalite, water in structure, 75-161, 1910; piezoelectric and elastic props., 75-2733; H₂O and OH location, PMR study, 75-874
- Sodium, flame photometric detn. in water, 75-397; distribution between scapolite and plagioclase, 75-2450; leaching from skeletal parts during fossilization, 75-1134; in carbonate sediments and rocks, 75-3386; in carbonaceous and ordinary chondrites, 75-431, 1277; in *Arctic* and *Antarctic* snow strata, 75-1788
— compounds, NaF, thermal expansion, 75-689; Debye temp., 75-691; vibrational displacements of ions, 75-187, 1948; NaCl, Debye-Waller factors, 75-189; Kikuchi lines, 75-2995; NaCl-type alkali halides, thermal expansion, 75-188; enthalpy variation in sodium borosilicate, 75-3142 (III.2); β-Na₂Si₂O₅, acid attack, 75-3299; NaInSi₂O₆ structure, 75-1900; sodium ammonium orthochromate dihydrate, structure, 75-177; Na₂WO₄ structure, 75-1923
— minerals, *Antarctica*, Na sulphate deposits, 75-2509; *North America*, natural sodium sulphate, 75-3129
- Sogdianite, *Tadzhik SSR*, crystal structure, 75-3020
- Soils, phosphate release and sorption, 75-820; sandy, stabilization by chemical additives, 75-824; chem. detn. of Mo, 75-1765; compaction, 75-825; contribution of forest opal to, 75-827; humidity measurement, 75-848; sampling interstitial waters, 75-1736; radon and thoron in, 75-2317; detn. of vermiculite, 75-796; K release from mica, 75-1843; clay, amorphous coatings on particles, 75-1831; tropical, grain analysis of clay fraction, 75-847; isolation of particle-size fractions, 75-2926; pH buffer intensities, 75-2923; estimation of organic matter, 75-2925; organic components, book, 75-2907; spectrophotometric detn. of As, 75-2871; extraction of amino acids using superheated water, 75-794; *England*, related to Lr. Oxford clay, 75-1844; *France*, Mt. Aigoual, clay fraction study, 75-2976; *Portugal*, gibbsite in, 75-1853; *Greece*, geochem. surveys, 75-1227; *Israel*, non-exchangeable ammonium in, 75-1829; microcrystalline quartz in, 75-1857; *Sudan*, derived from sandstone, 75-1854; *India*, radiocarbon dating, 75-14; *Singapore*, geochem. study in coastal reclamation, 75-133; *Japan*, ashy, geochem., 75-128; podzolic, clay minerals in, 75-122; volcanic ash, clay minerals in, 75-1872; *Queensland*, red and black, genesis, 75-1874; catena on weathered basalt, 75-841; *West Indies* and *Japan*, containing allophane, 75-2973; *Hawaii*, grey hydromorphic soils, 75-2971; *Mississippi* coastal plains, silty, clay mineralogy, 75-137; *south Carolina*, embayed quartz grains in, 75-2670; *Canada*, profile sampling, 75-2328; *Upper Amazon basin*, 75-2972; *Chile*, molybdate absorption characteristics, 75-2945
- Solar nebula, chemistry, 75-424; hydrodynamic instability, 75-2201; early condensates, 75-3444
- Solid solutions, mineralogy, symposium, 75-3142; ternary, crystallization and fusion, 75-3145
- Solomon Is. v. *Pacific Ocean*
- Solongoite, crystal structure, 75-3060; *USSR*, anal., opt., X-ray, 75-559
- Solution mining, cementing operation, 75-3133; in vertical fracture system, 75-3135; computer studies, 75-3136; *California*, of borax, 75-3134
- Solvent extraction, detn. of gold traces in rocks, minerals and ores, 75-39
- Sonora v. *Mexico*
- Sorensite, crystal structure, 75-159
- SOUTH AFRICA, emerald crystals, 75-305
fluorspar reserves, 75-997; dolostone from continental slope, 75-2660; kimberlite classification, 75-2612; Precambrian rocks, organic matter and trace elements, 75-2205; Precambrian iron-formations, 75-2220; ages of Onverwacht group, Swaziland sequence, 75-4; low-potash pillow basalts, 75-3700; Karroo and Beacon rocks, volcanoclastic material, 75-3797; age of Witwatersrand system, 75-3087; Agulhas Bank, microstructures of phosphorites, 75-1558; *Barberton*, RE elements in Archaean volcanic rocks, 75-345; mafic and ultramafic extrusives, 75-2615; *Barkly East*, Karroo volcanic rocks, 75-3670; *Bushveld complex*, chromitites, 75-3544; transformation and deformation of Pretoria series, 75-2685; *Bushveld* intrusion, chilled margin phase equilibria, 75-255; *Bushveld* granite and Rooiberg felsite, petrochem., 75-3701; *Cape Province*, ash beds and volcanic fragments in Karroo greywackes, 75-3798; age of Matsap formation, 75-1714; stromatolitic associations, 75-1557; *Dortrecht*, Birds River gabbro complex, 75-2619; *Driekop mine*, (Pt, Pd) (Bi, Sb), new mineral, 75-2533; *Jagersfontein*, pyroxenite nodules from kimberlite, 75-2611; *Kimberley*, phlogopites and potassic lecherites from kimberlites, 75-2430; *Lerombo*, rhyolitic lava flows, 75-3703; *Merensky Reef*, precious metal reference sample, 75-3421; *Messina*, origin of granite gneiss, 75-3702; *Namaqualand*, kimberlite pipes, 75-2613; petrogeology in granitic gneiss terrain, 75-2853; high-grade metamorphic rocks and intrusives, 75-2819; *Ottoshoop*, low grade brecciated fluor-spar ore, 75-3121, 3122; flotation tests, 75-3123, 3124; *Postmasburg*, zunyite, 75-3142 (IV.6); *Transvaal*, chromitite, 75-3545; crustal development in *Kaapvaal* craton, 75-2616, 2617; *Artonville mine*, Cu orebodies and country rock, 75-266; *Walvis Bay*, electro-chemical measurements, 75-3407; *Witwatersrand* gold fields, depositional environment, 75-1967; distribution and size of gold particles, 75-62; fossilised plants from Precambrian, 75-1135; *Zululand*, agate, petrified wood, 75-704
- SOUTH AMERICA, major continental margin basins, 75-2903 [41, 54]; iron formations, 75-2015
- South Dakota v. *USA*
- South Shetland Is. v. *Antarctica*
- SOUTH WEST AFRICA, gypsum deposits off coast, 75-2661; phosphate minerals from pegmatites, 75-2513; aenigmatite stability, 75-3481; *continental shelf*, phosphate in sediments, 75-1000; *Berg Auka*, windborne Zn, Pb, Cu, Cd from kiln, 75-2336; *Doros* gabbroic complex, 75-2614; *Karibib*, wadginite, 75-2476; dacite porphyry dyke, 75-3669; *Onganja mine*, cuprite, 75-3021, 3884; *Swakop-*

- SOUTH WEST AFRICA (contd.)**
end, Cape Cross, pegmatite, eremeyerite, 75-309; *Tsumeb*, alamosite, 75-3479
- SOUTHERN OCEAN, Macquarie I.**, magnetic deposits, of exposed oceanic crust, 75-1662
- Stratigraphic groups**, 75-858
- Stratigraphy, continental margin**, 75-2903 [24]; *Luconites*, 75-3506; *villamaninite*, 75-163; *S. pyrite province*, 75-908; *Aragon*, agonite type locality, 75-703; *Ebre Alta*, sedimentation, 75-614; *Gerona*, trace elements in fluorites, 75-1383; *Adosols*, 75-849; *Granada*, galena and barospar deposits, 75-1984; *Los Blancos*, wleyite and greenockite in ores, 75-194; *Málaga*, Cr-Ni mineralization, 75-178; *Ronda* peridotite massif, graphitic hornfels dykes, 75-2684; *Sierra Bermeja*, peridotites, 75-3693; *Sierra de Espuña*, caucinite-phosphate-carbonate association, 75-3387; *Sierra de Guadarrama*, garnets, 75-1289; tectonics and metamorphism, 75-3831; *Teruel*, mullite in trillias facies, 75-3460; *Vascongadas*, leisenbenite, 75-172
- Specific gravity**, determination by heavy liquid titration, 75-1118
- Heat**, modulation measurement method, 75-1754
- Microfluorimetric detn. of Se rocks**, 75-170
- Spectrographic analysis**, integrated-intensity method, 75-2897
- Spectrography**, emission, Cr and V in silicate rocks, 75-1796; V in rutile and mafic rocks, 75-1762; W in ores and concentrates, 75-2898; Ga and Ge in coke and coal, 75-1789; trace element analysis, 75-771
- Spectrophotometry**, flame emission, analysis of alkali metals, 75-772; Al determination, 75-1755; detn. of Nb in rocks, 75-1760; detn. of rhodium, 75-1766; As in soils and rocks, 75-2871; Co in laterites, 75-1875; Bi in sulphide ore, 75-1768; silica at high concentrations, 75-31
- Succite, Ontario**, opt., 75-3465
- Surtinite v. garnet**
- Sugnum peat**, phenolic palmitate in, 75-2274
- Sulphalerite**, in Zn-Fe-S system, 75-1032; synthetic, Fe content and microhardness, 75-1363; Fe²⁺ optical absorption spectra, 75-881; thermal release of Hg, 75-2490; calibration of geobarometer, 75-1033; experimental deformation, 75-1034; hydrothermal sphalerite = galena replacement, 75-1035; hydrothermal transport and deposition, 75-922; Cu-activated, deactivation with cyanide, 75-928; *Wales*, 75-932; *Ireland*, identification and analysis of lattice-held mercury, 75-765; *Italy*, microprobe analysis, 75-1361; *Greece*, 75-2022; *Turkey*, 75-972, 973; *Germany*, 75-2755; Cd-bearing, 75-934, 937; *Switzerland*, 75-3104, 3105; *Norway*, 75-2016; *Czechoslovakia*, manganese, anal., X-ray, 75-2491; Mn and Fe-bearing, anal., X-ray, 75-2489; *Poland*, 75-970; in quartz vein, 75-2021; in Lr.
- Triassic sandstones**, 75-941; *USSR*, 75-205, 947, 977; *Australia*, 75-1143; *New South Wales*, 75-3112; *New Zealand*, geothermometry and geobarometry, 75-1362; *Colorado*, 75-988; *Manitoba*, sphalerite geobarometry, 75-3114; *New Brunswick*, Fe-rich, In-bearing, 75-2041; *Nicaragua*, deformation and crystallization, 75-2045
- Sulphene**, grain surface etching, 75-3458;
- Austrian Alps*, localities, 75-1681; *Norway*, dating, 75-561; *USSR*, 75-212; *Russian SFSR*, in nepheline syenite, 75-460; *Bering Sea*, on continental shelf, 75-3802
- Spheres**, periodic close packing, 75-851
- Spherulites**, minimizing formation in Carbowax-impregnated clays, 75-75
- Spilites** related to keratophyres, 75-2599; *Norway*, 75-561; *India*, degradation of tholeiitic basalt, 75-648
- Spilitic lava flows**, *Turkey*, 75-1470
- Spinel**, crystal structure, 75-2991; electronic structure, 75-167; 'off-centre' ions in structure, 75-1919; crystal growth, 75-1004; melting relations, 75-3165; prepn. of MgAl₂O₄, 75-3184; non-stoichiometric MgAl₂O₄, vacant sites, 75-168; space group, 75-1920; topotactic phase formed from lithiophorite, 75-143; pressure effects, 75-3246; stability relations with olivine, 75-2131; synthetic, series Fe₃O₄-γ-Fe₂O₃, vacancy distribution, 75-880; optical absorption spectra of Cr³⁺, 75-3025; CuAl₂O₄, NiAl₂O₄, Cu²⁺ and Ni²⁺ optical spectra, 75-3185; NiAl₂O₄, CuAl₂O₄, ZnAl₂O₄, cation distribution, 75-3186-3188; NiAl₂O₄-Ni₂SiO₄ (spinel-olivine analogues), new orthorhombic phases, 75-275; polymorphs of Fe₂SiO₄ and Ni₂SiO₄, crystal structures, 75-276; NiAl₂O₄ analogue, structure, 75-1051; Co₂SiO₄ polymorph, 75-145; isothermal compression, 75-685; pyroxene-spinel symplectite, 75-288; gahnospinel, gem quality, 75-311; Cr-spinel, inclusions in olivine, 75-437; ZnMn_{1-x}Cr_xFeO₄, crystallographic study, 75-1918; Na₂WO₄ with spinel structure, 75-1923; in Apollo 15 rake samples, 75-2342; germanate analogue, elastic props., 75-1012; *Northumberland*, green, Fe-bearing, X-ray, 75-2397; *Germany*, 75-1628; *Yemen and Aden*, 75-1349; *South Africa*, Cr-, 75-3544; 3545; *Sri Lanka*, red gems, opt., X-ray, 75-3537; *Japan*, Cr-, in lherzolite inclusions, 75-514; *New South Wales*, from xenoliths in basaltic pipes, 75-258; *Pacific Ocean*, from deep-sea basalts, 75-612; *Arizona*, 75-3712; *California*, from metamorphosed ultramafic rocks, 75-653
- , hercynite, chloritoid breakdown product, 75-277; Fe²⁺ optical absorption spectra, 75-881;
- , pleonaste, *Russian SFSR*, inclusions in magnetite, 75-3541,
- , ulvöspinel, equilibria in system Fe-Ti-O, 75-261; in Apollo 15 rake samples, 75-2342; *China*, 75-515
- Spinodal precipitation** in minerals, 75-3142 (II.6)
- Spodiosite**, vibrational spectra, 75-2129
- Spodumene v. pyroxene**
- Spongiolite**, *Kazakhstan*, anal., 75-1561
- Springs, Dead Sea**, geochem. tracing, 75-2312; *Turkey*, hot, 75-1206
- Spurrite**, synthesis, 75-1060; *Texas*, in skarn, 75-644
- SRI LANKA**, graphite mineralization, 75-949; *Sabaragamuwa*, red gem-spinels, 75-3537
- Staining**, sulphates in aggregates and concretes, 75-2883; organic matter in marine sediments, 75-2884
- Stannite**, diffusion of sulphur, 75-1031; *Switzerland*, 75-3104; *New Brunswick*, 75-3559
- Stannoidite**, *New Brunswick*, 75-3559
- Stannopalladinite**, *Russian SFSR*, 75-3568
- Stantienite**, from amber deposit, 75-3330
- Starkeyite**, *California*, ferroan, X-ray, 75-3570
- Statistics**, in earth sciences, book, 75-69; and data analysis in geology, book, 75-2904
- Staurolite**, crystal chem., 75-3005; Fe²⁺ optical absorption spectra, 75-881; hydrogen locations, and chemical composition, 75-859, 1891; grain surface etching, 75-3458; transformation to kyanite, 75-143; chloritoid breakdown product, 75-277; from pelitic hornfels, 75-645; in metapelites, 75-654; in cordierite-sillimanite schist, 75-1632; *Ireland*, in *Leinster* granite, textural study, 75-459; *France*, in schist, anal., opt., X-ray, 75-1316; *Switzerland*, 75-1617; *Russian SFSR*, formation in metapelite, 75-1631, 2713; *Florida*, micro-textures with SEM, 75-2671; *Georgia* in sediments, 75-2672
- Steenstrupine**, *SFSR*, 75-1396
- Stellerite v. zeolite**
- Stephanite**, *Colorado*, 75-2766
- Steranes**, identification in geolipid extracts, 75-1794
- Stercorite**, *Peru*, X-ray, 75-1378
- Sternbergite**, *Peru*, 75-2010
- Stewartite**, polymorphism, 75-3056; *Germany*, crystal structure, 75-1945
- Stibiopalladinite**, *Russian SFSR*, 75-3568
- Stibiostannite**, *Russian SFSR*, 75-3568
- Stibioantallite**, relation to stannous tungstate, 75-1921; *Manitoba*, 75-3548
- Stibnite**, phase equilibria, 75-1039; DTA, 75-532; *Russian SFSR*, 75-2027; *Queensland*, 75-980; *New Zealand*, 75-2038; *Western Australia*, 75-3886
- Stilpnomelane**, *Japan*, from skarn ore deposit, 75-3508; *New Caledonia*, 75-3504; *North America*, 75-1642; *Canada*, 75-221
- Stishovite**, effect of pressure on lattice parameters, 75-681
- Strain zones** in vein quartz, 75-680
- Strelkinite**, *USSR*, new mineral, opt., X-ray, 75-2527
- Strengite**, solubility equilibrium, 75-2124
- Strength testing** of diamond, 75-678
- Stromatolites**, fine structures, 75-1529; *South Africa*, palaeo-environment significance, 75-1557; *South Australia*, containing hydromagnesite and aragonite, 75-3576; *New Brunswick*, from Proterozoic Green Head group, 75-1585
- Sromeyerite**, *Germany*, 75-2755; *Norway*, in polymetallic sulphide deposit, anal., 75-2501; *Peru*, 75-2010
- Strontianite**, synthesis, 75-2113
- Strontiginorites**, *Germany*, opt. and crystallographic investigation, 75-2482
- Strontium**, spectrographic detn. in presence of Ca, 75-2897; tool in facies analysis, 75-3381; distribution in oceanic profiles, 75-2310; between silicate and carbonate liquids, 75-2084; between diopside and silicate liquid, 75-2149; between clinopyroxene and liquid, 75-1058, 1159; between plagioclase and liquid, 75-1159; *Italy*, partitioning in volcanic rocks, 75-2252; *West Germany*, Ba-Sr mineralization, 75-2052; *Peru*, fractionation in calc-alkaline rocks, 75-348
- compounds, SrCl₂, prepn. from celestine, 75-2051; SrFCl, structure refinement, 75-1950; SrTiO₃ crystal growth, 75-1004; Sr₅(PO₄)₃Cl, structure refinement and random order anal., 75-179;

Strontium (*contd.*)

- SrSO₄ solubility, pressure dependence, 75-1041
- isotopes, in granites and volcanic rocks, 75-329; redistribution in shales, 75-381; in Phanerozoic sea-water, 75-1197; *Iceland*, in basalts, 75-1155; *Sardinia*, in andesites and lavas, 75-1158; *Greece*, in volcanic rocks, 75-3358; *Red Sea*, in core, 75-361; *Norway*, in ultramafic rocks, 75-2248; *Antarctica*, in basalt, 75-2247; in carbonate rocks, 75-2829; *Papua New Guinea*, in Quaternary volcanic rocks, 75-2242; *New Mexico*, in olivine-tholeiite basalt, 75-2249
- Struvite, in human pathology, 75-2515; *Western Australia*, 75-3886
- Sublimates, *Hawaii*, from lava fountains, 75-1162
- Subsurface temperature, geochem. indicators, 75-398, 399
- SUDAN, mining and oil exploration laws, 75-2776; *Darfur*, Tertiary-Recent volcanism, 75-1498; *Nubian desert*, sandstone-derived soils, 75-1854
- Sudbury, Ontario v. Canada*
- Sudeten Mts. v. Poland*
- Sudite, *Japan*, in core samples, 75-1869
- Sugars, *Russian SFSR*, in Precambrian rocks, 75-2206
- Sulitjelma v. Norway*
- Sulphates, IR spectra of minerals, 75-59; NaMg M^{III}(SO₄)₂, synthesis and structure, 75-3046; Cl:SO₄ ratios in atmospheric precipitation, 75-396; identification in aggregates and concretes, 75-2883; *Germany*, sulphate-arsenates, 75-935; *Italian Alps* and *Apennines*, isotopes in spring & stream water, 75-1205; *USSR*, isotope ratio variation, 75-1121; *Arctic Ocean*, relicts in chaledony, 75-2457
- Sulphides, crystal structure detn., 75-1809; electron probe analysis, 75-54, 55, 531, 533; XRF analysis, 75-2892; DTA study, 75-30; sulphur fugacities, 75-1040; phases in Cu-Fe-S systems, 75-1029, 1030; geochem. affinity of Co and Ge, 75-1013; heterogenous domains in mixed crystals, 75-3218; spectrophotometric detn. of Bi, 75-1768; inclusions in diamond, 75-1346; Cu-containing, diffusion studies, 75-1031; in pegmatites, 75-2493; biotite-sulphide equilibria in granites, 75-2209; mineralization in *Archaean felsic rocks*, 75-1971; hydrothermal mineralization, 75-480; syn-sedimentary ore formation, 75-921; laser microspectral anal. of ores, 75-218; in natural waters, reducing properties, 75-3408; volcanogenic, metallogenetic significance, 75-3069; formation, 75-3066; *Ireland*, *Tynagh*, deposit, 75-322; *Cyprus*, geol., geochem., genesis of deposits, 75-2023; *Turkey*, mineralogy, paragenesis of deposits, 75-1990; *Germany*, folding of orebodies, 75-1986; *Switzerland*, ores, 75-938; *USSR*, deposits, 75-3090; *South Africa*, flotation tests on ores, 75-3123; *India*, mineralization, 75-217; associated with diabase dykes, 75-1997; in copper belt, 75-1996; trace element, electron probe study, 75-319; *Solomon Is.*, mineralogy, 75-955; *Arizona*, geol. of deposits, 75-985, 986; *Hawaii*, in garnet pyroxenite xenoliths, 75-3739; *Missouri*, flow breccia deposits, 75-623; *Virginia*, iron sulphide mines, 75-959; *British Columbia*, age of mineralization, 75-3116, 3117; *Ontario*, magnetic fabric of deposits, 75-2751; *N-W Territories*, exploration in permafrost terrains, 75-415
- Sulphobismuthides, reflectance-dispersion curves, 75-534
- Sulphohalite, structure related to schairerite, 75-3042
- Sulphosalts, thermochem. approximations, 75-1043; in pegmatites, 75-2493; *Switzerland*, 75-938
- Sulphur, monoclinic γ , crystal structure, 75-162; chemical forms in coal, 75-1785; orthorhombic, molecular distortion, 75-163; detn. in chromite, 75-2881; stability of annite, 75-2155; solubility in magmas, 75-254; detn. of total S in limestones, 75-36; in silicate rocks, 75-35; in pegmatites, 75-2758; fugacity measurement, 75-1040; in lunar fines, 75-422; *United Kingdom*, resources, 75-234; *Russian SFSR*, 75-2027; *India*, in gases from thermal springs, 75-403; *Galapagos I.*, crystallized at volcanic vents, 75-1507; *Arizona*, in porphyry Cu-deposits, 75-920; *Texas*, extraction, 75-2069; *Canadian shield*, in *Archaean volcanic rocks*, 75-315
- compounds, SO₂ in volcanic gases, 75-3753; contribution to stratospheric aerosol layer, 75-1220
- deposits, morphology, 75-2070; *Poland*, isotope studies, 75-2232
- isotopes, fractionation in yeast, 75-1128; in soil organic substances, 75-2907 (5); *England*, related to ore genesis, 75-2210; *Finland*, in ores, 75-3342; *Czechoslovakia*, in sedimentary and endogenous sulphides, 75-3343; *Poland*, origin of deposits, 75-1149; *Australia*, in Pb-Zn-Ag deposit, 75-1143; *New York* and *Ontario*, in Precambrian sulphates and sulphides, 75-1183; *Alberta*, in Cu-deposits, 75-2000
- Suolunite, crystal structure, 75-871; *Yugoslavia*, anal., X-ray, DTA, 75-1306
- Supergene mobility of elements, *USSR*, in water-bearing rocks, 75-3334
- Superheavy elements, in natural and proton-irradiated materials, 75-1124, 1125
- Superplasticity, transformation in Earth's mantle, 75-1659
- Superstructures, minimum residual method of determination, 75-856
- SURINAM, ages of major events in geological column, 75-20; geochem. exploration, 75-409; minerals and mining, 75-224; resiliification of bauxites, 75-2008; *Awalpé creek*, gabbro, Ni and Cu contents, 75-340; *Bakhuis Mts.*, granulites and associated charnockites, 75-676; sapphirine and quartz in mesoperthite, 75-455; *Tapajé Creek*, itabirite and lateritic iron deposits, 75-232
- Sutherland v. Scotland*
- Svanbergite, *Portugal*, in bauxitic clay, anal., opt., 75-2510
- Swat v. Pakistan*
- SWAZILAND, Precambrian granitic rocks, 75-2618; crustal development in *Kaapvaal* craton, 75-2616, 2617
- SWEDEN, polydiapirism of granitic rocks, 75-3683; hornblende, biotite, phlogopite fission track studies, 75-2803; Ca/Na distribution between scapolite and plagioclase, 75-2450; palaeosalinity of post-glacial sediments, 75-2272; meteorite impact melt rocks, 75-3449; *Dalarna*, Hg in lake sediments, 75-2273; *Göbnehall*, dating of basalt neck, 75-2802; *Kiirunavaara*, antiperthites in metavolcanic rock, 75-2447; *Lake Alstern*, ferromanganese concretions, 75-1146; *Långban*, cubic magnetite, 75-2471; pinakioilite, 75-884; *Lauttakoski*, Ni-bearing magnetite from soapstone, 75-2472; *Mr. Billingen*, U, Mo and V in alum shale, 75-3377; *Örö-Hamno massif*, postmagmatic differentiation of Precambrian granite intrusives, 75-2592; *Västerbotten*, age of Caledonide deformation, 75-289
- SWITZERLAND, placer gold deposits, 75-3084; inclusions on *r-l*-twins of quartz, 75-1672; bonding clays, 75-2941
- Aar massif*, ore mineralization, 75-3105
- Alps*, framboidal pyrite in concretions, 75-2487; heat flow and U, Th and K in various rocks, 75-3867; metamorphic ore deposits, 75-938; age of polymetamorphic terrain, 75-728; tectonics and metamorphic events, 75-1620; *Basle*, trace elements in Jurassic rocks, 75-2264; *Bergell Alps*, mineral assemblages in pelitic rocks, 75-1617; high-grade metamorphism, 75-1618; apatite veins and pegmatites, 75-3878; *Binnatal*, realgar and orpiment, 75-890, 1936; jordanite, 75-887; *Bodensee*, heavy metals in lake sediment, 75-3374; *Canton Ticino*, heterogenite in pegmatite, 75-1673; *Frodalera*, aluminotschermakites, 75-3484; *Gottthard massif*, plagioclase in margarite-bearing rocks, 75-3511; *Graubünden*, mineralization in muscovite-alkali feldspar augengneiss, 75-3104; *Lengenbach quarry*, rathite-IV, 75-2500; *Simplon Tunnel*, steep isograd surfaces, 75-661; *Ticino*, pegmatites, trace elements in quartz and feldspars, 75-2211
- Syenite, spatial distribution of U by f-radiography, 75-353; *Sutherland*, 75-587; *Germany*, hornblende, 75-2238; *Norway*, porphyry dyke, 75-2561; *Czechoslovakia*, 75-591; *Malawi*, age detn., 75-663; *Greenland*, age deta., 75-1720
- Sylvite, Br, Rb partitioning, 75-2128; *Russian SFSR*, Br content, 75-3587; *Nova Scotia*, -bearing rocks, 75-2064
- Symplectite, pyroxene-spinel, at high pressures and temperatures, 75-288
- Symplectite, related to metavivianite, 75-1393
- SYRIA, calcareous phosphate sediments, 75-1001; *Baër-Bassit*, ophiolitic association, 75-3671
- Systems:
- Al₂O₃-SiO₂-H₂O, 75-2947, 3276, 3277
- Al₂O₃-MnO-MnO₂-SiO₂, 75-2142
- Al₂O₃-KAlO₂-FeO-MgO-SiO₂-H₂O, 75-3818
- Ag₂S-Cu₂S-Bi₂S₃, 75-3213
- Ag₂S-Cu₂S-Sb₂S₃, 75-3213
- AgSbS₃-PbS, 75-269
- BaO-Al₂O₃-SiO₂, 75-3289, 3290
- BaO-SrO-SiO₂, 75-3243
- BaO-CeO₂-TiO₂, 75-3199
- Bi-Sb-S, 75-2111
- C-O-H-N, 75-248, 249
- Ca-Fe-Si-O-H, 75-1053; 2137
- CaO-SiO₂-CO₂, 75-1060
- CaO-Al₂O₃-SiO₂-H₂O-CO₂, 75-1073
- CaO-Al₂O₃-Fe₂O₃-SiO₂, 75-2138
- CaO-MgO-FeO-SiO₂, 75-287
- CaO-MgO-FeO-SiO₂-C-H₂O₂, 75-3167
- CaO-MgO-Al₂O₃-SiO₂, 75-2145
- CaO-MgO-Al₂O₃-SiO₂-H₂O, 75-3273
- CaO-MgO-Al₂O₃-SiO₂-CO₂-H₂O, 75-247
- CaO-MgO-SiO₂-H₂O, 75-3169
- CaO-MgO-SiO₂-H₂O-CO₂, 75-246, 3162
- CaO-B₂O₃-P₂O₅, 75-2125

- (cont.)
 CO₃-MgCO₃, 75-2117
 O-P₂O₅-H₂O, 75-3234
 O-BaO-WO₃, 75-3203
 F₂-SrF₂, 75-3237
 CO₃-MgCl₂-H₂O-CO₂, 75-3142 (IV.10)
 MgSi₂O₆-Mg₂Si₂O₆-H₂O, 75-2148
 SiO₃-Al₂O₃-Fe₂O₃, 75-2138
 SO₄·2H₂O-CaSO₄·½H₂O-H₂O, 75-2115
 As-S, 75-3142 (IV.3)
 Ni-As-S, 75-3142 (IV.3)
 Fe-S, 75-1029
 Sn-S, 75-2107
 Fe-S, 75-3208
 Ni-S, 75-886, 3209
 Zn-S, 75-1032
 C-O, 75-2122
 Mg-O, 75-2099
 O-Fe₂O₃-TiO₂, 75-2100
 Ti-O, 75-261
 Ti₂O₅-Ti₃O₅, 75-3194
 O-Fe₂O₃-Cr₂O₃, 75-3142 (IV.9)
 S-SnS, 75-2106
 H₂O-CO₂, 75-246, 250
 S-Sb₂S₃-Na₂S-H₂O, 75-1039
 I-RbI, 75-3142 (II.7)
 I-RbCl, 75-3142 (II.7)
 O-MgO-CaO-Al₂O₃-SiO₂-H₂O, 75-3270
 AlSiO₄-BaAl₂Si₂O₈-SiO₂-H₂O, 75-2167
 AlSi₂O₆-RbAlSi₂O₆-CsAlSi₂O₆, 75-3301, 3303
 AlSi₃O₈-Al₂O₃-H₂O, 75-3267
 AlSi₃O₈-NaAlSi₃O₈-Al₂SiO₅-SiO₂-H₂O-HCl, 75-3283
 SO₄-Cs₂SO₄, 75-3222
 F-AlF₃-Na₃AlF₆, 75-2130
 MgO-H₂O, 75-3198
 MgO-FeO-TiO₂, 75-1022
 MgO-Al₂O₃-SiO₂, 75-1055
 MgO-Al₂O₃-SiO₂-H₂O, 75-653, 3499
 MgO-SiO₂-CO₂-H₂O, 75-1467, 3275
 MgO-MgCr₂O₄-Ca₂SiO₄-Ca₃MgSi₂O₈, 75-3160
 MgO-MgCr₂O₄-Ca₃MgSi₂O₈-CaMgSiO₄, 75-3160
 MgAl₂O₄-Al₂O₃, 75-2097
 Mg₂SiO₄-Fe₂SiO₄, 75-3246
 Mn-Fe-Al-Si-O-H, 75-3142 (IV.5)
 MnO-FeO-ZrO₂-SiO₂, 75-3161
 NaCl-KCl, 75-3142 (I.7)
 NaBr-KBr, 75-3142 (I.7)
 NaI-KI, 75-3142 (I.7)
 NaBr-NaI, 75-3142 (I.7)
 NaF-LiF-BeF₂, 75-1949
 Na₃AlF₆-AlF₃, 75-3238
 Na₂O-Fe₂O₃-Al₂O₃-TiO₂-SiO₂, 75-285
 Na₂O-BaO-SiO₂, 75-2177
 Na₂CO₃-CaCO₃-H₂O, 75-1049
 NaAl₂O₄-Ni₂SiO₄, 75-275, 1051
 NaAlSiO₄-KAlSiO₄-SiO₂-H₂O, 75-3300
 NaAlSi₃O₈-H₂O, 75-3142 (III.1)
 NaAlSi₃O₈-H₂O-CO₂, 75-1067
 NaAlSi₃O₈-CaAl₂Si₂O₈-Na₂CO₃-H₂O, 75-3286
 Na₂SO₄-K₂SO₄-MgSO₄-H₂O, 75-2114
 Pb-Sb-S, 75-3210
 PbO-SiO₂, 75-2178, 3261
 SiO₂-Al₂O₃-K₂O-H₂O, 75-295
 SiO₂-Al₂O₃-CaO-MgO-MnO, 75-2090
 SiO₂-Al₂O₃-MgO-FeO-K₂O-H₂O, 75-2075
 Sn-Sb-S, 75-2110
 SrO-CdO-V₂O₅, 75-3204
 Sr₂SiO₄-Sr₂GeO₄-Ba₂GeO₄-Ba₂SiO₄, 75-3244
 TiO₂-CrO_{1.5}, 75-263
 anorthite-diopside-enstatite-silica, 75-3257
 apatite-nepheline-villiaumite, 75-1071
 celsian-silica-alumina, 75-3290
 diopside-aqueous vapour, 75-286
 diopside-albite-anorthite, 75-2149
 diopside-albite-anorthite-water, 75-1058
 Fe-rich orthopyroxene-olivine-quartz, 75-1050
 forsterite-anorthite-silica, 75-1250
 gypsum-anhydrite, 75-2116
 nepheline-villiaumite-lithium fluoride, 75-252
 olivine-orthopyroxene, 75-1130
 quartz-orthoclase-albite, 75-1464
 sanbornite-celsian-silica, 75-3289
 Szájbelyite, *German*, crystal structure, 75-3059
 Taaffeite, gem. discovery, 75-311
 Tacharanite, X-ray, 75-3480; *Aberdeen-shire*, in Huntley gabbro, opt., 75-700
 Tadzhikistan v. USSR
 TAIWAN, metallic deposits, structural controls, 75-950; *Kinkuashih mine*, Sb in enargite and luzonite-famatinite, 75-2499; *Hualien*, fuchsite from Au-bearing rock, 75-2433
 Taiyite, *China*, new aeschynite-priorite variety, anal., opt., X-ray, 75-1352
 Takovite, *Western Australia*, 75-3886
 Talc, triclinic cell comparison, 75-2989; oxygen K absorption spectra, 75-2986; in synthesis of fluor-asbestos, 75-3264; inhomogeneous dehydroxylation, 75-3274; *United Kingdom*, review of deposits, 75-2047; *Shetlands*, 75-2068; *India*, from greenschists, 75-481
 Talnakhite, synthesis, 75-1029
 Tamil Nadu v. India
 Tantalite, *Surinam*, 75-224; *Brazil*, tantalite pegmatites, 75-233
 Tantaloniobates, mineralogy and crystal chem., 75-519; scandium ixiolite, 75-520
 Tantalum, *Canada*, deposits, 75-2001; complex Ta-oxides, crystal chem., 75-882
 TANZANIA, colourless grossular garnets, 75-2186; *Ally* and *D'Souza mines*, fission track dating of tanzanite, 75-5; *Handeni*, kornerupine and sinhalite, 75-1296; *Lake Manyara*, emerald, alexandrite and ruby, 75-1082; *Lalatema*, transparent tremolite, 75-1094; *Mt. Kilimanjaro*, green enstatite, 75-1089
 Tanzanite v. zoisite
 Tapiolite, magnetic structure, 75-169; *Czechoslovakia*, manganoan, anal., opt., X-ray, 75-2478; *Manitoba*, 75-3548
 Taranakite, *Western Australia*, 75-3886
 Tasmania v. Australia
 Tatra Mts. v. *Czechoslovakia*
 Taylorite, *Western Australia*, 75-3886
 Tectonics, USSR, zoning in Permian-Triassic rocks, 75-3864; *Arabian Peninsula*, 75-3893; *Sri Lanka*, control of graphite mineralization, 75-949
 Tektites, and microtektites, uranium content, 75-3453
 Telargpalite, *Russian SFSR*, new Pd-Ag-Te mineral, opt., X-ray, 75-2528
 Telemark v. Norway
 Tellurantimony, *Quebec*, new mineral, chem., opt., X-ray, 75-3600
 Tellurium, chemistry and technology, book, 75-63; analysis in rocks, 75-2878; AAS detn. on ion-exchange resins, 75-2872; spectrophotometric detn. on (Pd, Pt)-(Te, Bi)₂ mineral system, 75-764
 — minerals, crystal structure data, 75-1809; *Malagasy Rep.*, in pegmatitic granodiorite, 75-2025
 Temagamite, *Ontario*, new min., opt., X-ray, 75-3604
 Template plotting, 75-1018; fluid-bearing reactions, 75-246
 Tengerite, *Kazakhstan*, anal., opt., X-ray, 75-3580
 Tennantite, DTA, 75-532; multiple substitutions, 75-3142 (IV.2); *Germany*, 75-2755
 Tennessee v. USA
 Tenorite, transformation from malachite, 75-143; *Sardinia*, 75-968
 Tepee structures, *Morocco*, in intertidal carbonate sands, 75-1554
 Tephra, *Iceland*, heterogeneous glass, 75-346
 Tephrite, *France*, 75-2089
 Ternary structures, crystal chem., book, 75-64
 Teschenites, *New South Wales*, 75-1432
 Testibiopalladite, *China*, new mineral, anal., opt., X-ray, 75-2529
 Tetradymite, *Japan*, anal., 75-530; *Queensland*, plumbian, 75-1366
 Tetrahedrite, DTA, 75-532; multiple substitutions, 75-3142 (IV.2); synthetic, substitution of Cu by Zn, Fe, Ag, 75-1647; synthesis and structure of Cu₁₂-xTe₄S₁₃, 75-888; *Sardinia*, 75-968; *Greece*, 75-2022; *Bulgaria*, argentinean mercurian, opt., X-ray, 75-3561; *Turkey*, 75-973; *Germany*, 75-934; *Switzerland*, 75-3104; *Czechoslovakia*, Ag-rich, anal., 75-3560; *Queensland*, tetrahedrite-freibergite series, 75-2498; *Colorado*, 75-2766; *Greenland*, 75-1397, 2497
 Texas v. USA
 Thalenite, USSR, 75-212
 Thallium, *Burma*, in sphalerite, 75-2492; *Nevada*, in orpiment, 75-527; *Brazilian shield*, in deep-seated crustal rocks, 75-330
 Thaumassite, *Austria*, in basalt, 75-1682
 Therallite, *New South Wales*, 75-1432
 Thermal analysis, in Earth sciences, 75-3077; high-temp. reactions, 75-1746; quartz, high-low inversion, 75-3291, 3292; sodalites, 75-3305; sepiolites, 75-2941; clays, effect of separation method, 75-2918; oil in shales, 75-1777; ceramic materials, 75-1797
 — conductivity, cristobalite, 75-3856; *Hawaii*, vesicular basalt, 75-2740
 — expansion, alkali halides, 75-188, 690; NaF, KBr and RbBr, 75-689; rutile and anatase, 75-3860; orthorhombic PbO, 75-3858; tetragonal PbO, 75-3859; silicates, 75-864; β-eucryptite, 75-2739
 Thermocouples, W-Re, construction, 75-1751
 Thermoluminescence, thermal stability, 75-2998; zircon, 75-2901; quartz in Sn-W and Pb-Zn lodes, 75-3075; granites, 75-3863; analysis of Recent sediment cores, 75-1791; anomalous high temp. fading, 75-2732; fading in lunar fines, 75-1255
 Thronatrite, *Greenland*, from alkaline intrusion, 75-3582
 Thermoviscoelastic props. of rock at high temps., 75-2743
 Thin sections, mechanical prep., 75-2850; size measures, 75-24, 1744
 Thiophene complexes on montmorillonite, 75-812
 Tholeiites, stability of Ca-poor pyroxene, 75-2146; *Azores*, compositional difference, 75-2643; *India*, transition to spilite,

Tholeiites (contd.)

- 75-648; *Galapagos I.*, chem., 75-2650; *California*, glasses in, 75-1484; *New Brunswick*, zoned plagioclase, 75-1329
- Thorite, *France*, in granites, 75-3346
- Thorium, detn. by delayed neutrons, 75-782; in zircon, 75-439; in marine baryte, 75-2216; ^{234}Th - ^{238}U disequilibrium in ocean surface, 75-2295; in meteorites, 75-1259; in Venusian rocks, 75-3327; *Russian SFSR*, in Cainozoic basalt, andesite and dacite, 75-352; *Idaho*, rare earths in veins, 75-2215; *Brazil*, in K-rich rhyolites, 75-2239
- compounds, ThO_2 optical absorption spectra, 75-3195; $\alpha\text{-ThSiO}_4$ synthesis, 75-2134
- Thoron, gas in soil particles, 75-2317
- Thucolite, *South Africa*, containing fossilised plants, 75-1135
- TIBET, *Trivishtap*, geol., 75-1812
- Till, *Canada*, boron in, 75-358
- Tilleyite, synthesis, 75-1060
- Tin, economics and production, 75-60; liberation in plutonic igneous cycles, 75-1965; detn. in ferrotungsten and tungsten ore, 75-1774; mineralization in *Western Europe*, 75-1957; *SW England*, magmatism and mineralization, 75-199; detn. in sediments off *N. Cornwall*, 75-2880; *USSR*, geochem. zoning in east *Ural* uplift, 75-324; tin-bearing granite, 75-2212; *Queensland*, mineralization in granitic rocks, 75-2213
- deposits, 75-904; quartz in Sn-W lodes, 75-3075; *Cornwall*, 75-3099; *USSR*, physicochemical conditions for ore formation, 75-209; *Russian SFSR*, genetic type of placers, 75-3089; *China*, geol., 75-2031; *Brazil*, tin-tantalite pegmatites, 75-233
- minerals and compounds, stannous tungstate, structure and relation to SbTaO_4 , 75-1921; *New Brunswick*, sulphides, 75-3559
- native, *Algeria*, in stanniferous greisen, 75-1348
- Tincalconite, *Russian SFSR*, from mud cones, 75-543
- Tirodite v. amphibole
- Titanium, detn. in iron ore by AAS, 75-1760; in phyllosilicates, 75-63; *Italy*, in magmatic rocks, 75-2253; abundance in volcanic rocks, 75-2252; distribution in sediments, 75-2269; *Russian SFSR*, in garnets from kimberlite, 75-446
- minerals and compounds, TiO_2 solid soln. in SiO_2 , 75-3164; TiO_2 , vertical zone melting, 75-3142 (II.2); Fe-Ti oxide minerals in igneous and metamorphic rocks, 75-2469; *Poland*, Fe-Ti oxide minerals in andesite, 75-2470; *China*, Fe-Ti oxides from layered basic-ultrabasic intrusives, 75-515
- Titanomaghemite, *Poland*, in andesite, anal., 75-2470
- Titanomagnetite, *Poland*, in basaltic formation, 75-3540; in andesite, anal., 75-2470; *Pacific Ocean*, from deep-sea basalts, 75-612
- Titan-rosenbuschite v. rosenbuschite
- Titrimetry, Fe^{3+} in silicate rocks, 75-34; semi-automatic, for cyanide analyses, 75-766
- Tlalocite, *Mexico*, new mineral, anal., opt., X-ray, 75-3606
- Tobermorite, *Yugoslavia*, 75-1306
- Togichi Pref v. Japan
- Tochilinite, crystal structure, 75-883; tochilinite II, acicular variety, structural study, 75-173
- Todorokite, *Korea*, 75-978; *Western Australia*, 75-3886
- Toluene, in ground water, 75-405
- Tonalite, melting at grain boundaries, 75-1016; geochem. of actinolitic hornblends, 75-469
- Tonstein, *Poland*, mineralogy, 75-2967
- Topaz, coloured by gamma radiation, 75-1097; *USSR*, helium isotope content, 75-317; *Nigeria*, in tuffisites, 75-1419; *Colorado*, 75-2765; *Georgia*, 75-310; *New Hampshire*, 75-2762
- Tosudoite, *Japan*, in core samples, 75-1869
- Tourmaline, effect of gamma rays, 75-1056; minimal reflectivity angle, 75-2738; optical absorption spectra, 75-3008; refractometer measurements, 75-3315; heat treatment, 75-2189; synthesis in chloride media, 75-278; chrome-, 75-1088; *Ireland*, 75-459; *Portugal*, shorl from granites, apaites and pegmatites, 75-1136; *Israel*, surface texture by SEM, 75-2663; *Kenya*, red, gem quality, opt., 75-1096; *Afghanistan*, achroite, opt., 75-1095; *India*, in Precambrian quartzite, 75-2664; *Western Australia*, dravite, 75-3886; *Florida*, micro-textures with SEM, 75-2671; *Georgia*, in sediments, 75-2672; *Kansas*, 75-1591
- Trace elements, in reference samples, 75-1223; partitioning, 75-2083; XRF background corrections, 75-2891; anal. by direct-reading emission spectrometry, 75-771; thermodynamic props. in solid solns., 75-3142 (I.8); ESR study of distribution in minerals, 75-1792; in quartz sands, neutron activation anal., 75-1787; deep-sea scavenging model, 75-2306; metal complexes in sulphidic marine waters, 75-1208; in fossil bone phosphate, 75-2321; in primitive meteorites, 75-1273, 1274; Apollo 14 breccias, 75-421; *British Isles*, in limestones and dolomites, 75-3388; *Britain*, in Jurassic rocks, 75-2264; *France*, in inclusions in gangue of quartziferous vein, 75-1142; *Spain*, in fluorites, 75-1383; *Austria/Italy*, in dolomite-calcite, 75-1374; *Germany*, in granite-hornfels/slate contact, 75-2237; *Switzerland*, in pegmatitic quartz and feldspar, 75-2211; in Jurassic rocks, 75-2264; *Norway*, chem. of gabbro-amphibolite transitions, 75-658; *Czechoslovakia*, in Cainozoic volcanic rocks, 75-1163; in melilitic rocks, 75-337; *Russian SFSR*, in hornfels, 75-387; *Atlantic Ocean*, in deep-sea sediments, 75-1174; variation in volcanic rocks, 75-2245; *India*, behaviour in differentiated basalts, 75-2251; in sulphides, electron probe study, 75-319; in *Singhbhum* granite, 75-2240, in sediment off *E. India* coast, 75-1565; *South Africa*, in Precambrian rocks, 75-2205; *Central Africa*, in kaolinites, 75-1852; *Pacific Ocean*, geochem. of pelagic clay core, 75-1576; *China*, in Mesozoic and Cainozoic sediments, 75-377; *California*, in sandstones and clays of Ione formation, 75-374; in *Plumas* copper belt, 75-325; *Minnesota*, geochem. of Archean volcanic rocks, 75-344; metals in *Gulf of St. Lawrence*, 75-1194; *British Columbia*, in porphyry copper deposits, 75-3340; *Quebec*, in granite pluton, 75-3359; *Greenland*, in solidification of *Skaergaard* layered series, 75-1161
- Trachybasalt, usage of term, 75-2578; *Russian SFSR*, chem., 75-1447
- Trachyte, *Sardinia*, phonolitic, 75-1493; *Austria*, alteration, 75-3718; *New South Wales*, in salic magmas, 75-3707
- Transbaikal, *Russian SFSR* v. *USSR*
- Travertine, *Arizona*, 75-2771
- Tremolite v. amphibole
- Tridymite, crystal growth, 75-3242; cristobalite-tridymite transition, 75-2179; *Portugal*, 75-2458
- Triphylite, *SW Africa*, from pegmatites, 75-2513; *South Dakota*, 75-1399
- Triterpanes, identification in geolipid extracts, 75-1794
- Tritium, *North Atlantic*, 75-2305; *North Pacific*, profiles, 75-2304
- Troctolite, spinel-, lunar, age, 75-1244
- Trögerite, synthetic, phase transition, 75-268
- Troilite, α -transformation, 75-1037; *USSR*, anal., 75-1357; *New Brunswick*, 75-2041
- Trolleite, *California*, crystal structure, 75-894
- Troms v. *Norway*
- Trona, *Greenland*, from alkaline intrusion, 75-3582
- Trondheim v. *Norway*
- Trondhemite, *Norway*, age detn., 75-561; *New Mexico*, Rb/Sr dating, 75-1725
- Troodos Mts. v. *Cyprus*
- TRUCIAL STATES, *Abu Dhabi*, Holocene gypsum and anhydrite, 75-2662
- Tuffisites, *Nigeria*, with topaz, 75-1419
- Tuffs, *Greece*, mineralogy, petrol., 75-2637; *Germany*, trachytic, weathering, 75-834; *Kenya*, phonolitic ash-flow, 75-1499; *Japan*, containing laumontite, 75-503; altered, containing mica and montmorillonite, 75-1866; *Colorado*, in Green River formation, 75-501
- Tulameen R., *BC* v. *Canada*
- Tulameenite, *British Columbia*, 75-3534; opt., X-ray, 75-3605
- Tungstates, stannous, structure and relation to SbTaO_4 , 75-1921; $\text{Al}_2(\text{WO}_4)_3$ structure, 75-1922; Na_2WO_4 structure, 75-1923
- Tungsten, spectrographic detn. in ores and concentrates, 75-2898; *New Zealand*, biogeochem. exploration, 75-2339
- deposits, 75-904; detn. of Sn and As in ores, 75-1774; *China*, geol., 75-2031; *Australia*, hydrothermal deposit, 75-954; *Brazil*, economic potential, 75-966
- Tungstenite, origin, thermodynamic data, 75-251
- Tungstite, *Australia*, 75-954
- Turbidites, *India*, from sandstone-shale sequence, 75-634
- TURKEY, tectonics and mineralization in Tethyan region, 75-1958; *Anotolia*, ancient mining in Cu deposit, 75-2024; nomenclature of volcanic rocks, 75-2604; hot springs, 75-1206; *Antalya Bay*, geol., 75-1421; *Bitlis*, structure and metamorphism, 75-3838; *Black Sea coastal region*, sulphide deposits, 75-1990; *Bursa*, bursaites, 75-2506; *Eskişehir*, Tertiary volcanic and sedimentary rocks, 75-2550; borate deposits, clay minerals, 75-1855; *Göğdes*, migmatites, 75-1630; *Kizil Dağ*, basic-ultrabasic massif, 75-1471; *Mihalıççık*, Miocene-Pliocene deposits, 75-1549; *Murgul*, copper deposits, 75-972; *Piraziz*, ore deposits, 75-973; *Sason* and *Baykan* areas, stratigraphy, 75-2551; *Taurus* de *Pisidie*, submarine spilitic lava flows, 75-1470
- Turkmenistan v. *USSR*
- Turquoise, natural and synthetic, 75-1101,

- uoise (*contd.*)
 102; faustite gemstone, 75-1105;
 Colorado, 75-2766
 nning, triperiodic classification, 75-2992;
 n calcite crystals, 75-272; transformation,
 Mediangesatz', 75-850
 igh v. Ireland
 lite, Germany, 75-2755
 henian Sea v. Mediterranean
- ANDA, mpororoite, new mineral, 75-
 8601; *Bufumbira*, leucite-bearing lavas,
 75-3699
 ainian SSR v. USSR
 kite, cutting and polishing, 75-21
 abasic rocks, *France*, in lens in granites
 and gneisses, 75-1604; *Norway*, RE
 distribution, 75-3361; *Czechoslovakia*,
 feeding channels, 75-2602; *India*, opaque
 minerals from, 75-2473; *China*, geo-
 chem. of Ni-bearing intrusion, 75-3348
 inclusions, *Fife*, in tuff-pipes, 75-1438
 abasite, *Swiss Alps*, 75-3867
 amafic rocks, classification, 75-2536;
 anal. of standard rocks, 75-2340; chem.
 characteristics, 75-2580; serpentiniza-
 tion, 75-3395; isotope study, 75-1193;
 neutron activation anal. of Rb, Cs, Ba,
 and RE, 75-38; *Portugal*, serpentinized,
 75-2704; *Italy*, 75-933; chem., 75-1441;
Norway, eclogites from, 75-2695; Sr
 isotope evidence for crustal contamina-
 tion, 75-2248 *Russian SFSR*, nitrogen
 and hydrocarbon gases in, 75-3415;
 contacts between bodies of dunite-
 harzburgite association, 75-642;
Atlantic Ocean, Au content, 75-343;
Canary Is., clinopyroxene geobarometer,
 75-2414; *South Africa*, in terms of
 CMAS system, 75-2615; *Indian Ocean*,
 three association types, 75-2649; *New
 South Wales*, 75-1432; *Western Australia*,
 75-3673; *Alaska*, petrol. of complex,
 75-2572, 2626; *California*, contact meta-
 morphism, 75-653; *British Columbia*,
 palaeomagnetism, 75-696; *Greenland*,
 Precambrian, 75-3616
 — inclusions, in basalt, composition of
 upper mantle, 75-2576
 — nodules, *Italy*, in Ladinian volcanic
 rocks, 75-2565
 — xenoliths, fusion at high pressures, 75-
 3178; *France*, chem. variation, 75-3690
 — seismic velocities in rocks, *Cyprus*, 75-
 1660
 — ultraviolet spectroscopy, surface acidity of
 clay minerals, 75-81
 — vivspinel v. spinel
 — mangite, *Czechoslovakia*, from uranium
 deposits, 75-3085
 — umbozerite, *Russian SFSR*, new mineral,
 anal., X-ray, 75-1398
 — underground workings, *United Kingdom*,
 records, 75-3078
- ION OF SOVIET SOCIALIST REPUB-
 LICS, density of Permian-Triassic rocks,
 75-3864; Precambrian banded iron-
 formations, 75-2011; Hercynian aul-
 cogens, 75-3865; picropharmacolite,
 75-183; bromellite, 75-1351; strelkinite,
 new mineral, 75-2527; hypogene ore
 deposits, K feldspars, 75-1322; augelite
 from stanniferous rare-metal granite,
 75-539; *Russian platform*, oil indicators
 in sediments, 75-3371; *NE*, native gold,
 75-948; *Far East*, granitoids, 75-1448;
east Baltic Shield, old faults and move-
 ments, 75-2549; *Dzhida deposit*, identi-
 fication of sulphobismuthides, 75-534;
Gaurdak formation, fluid channels in
 salt, 75-393; *Kyzyl Kum*, ferruginous
 volborthite, 75-541; *Torgovskoye*, first
 USSR find of koechlinite, 75-542
 —, ARMENIAN SSR, laser beam action
 on volcanic rocks, 75-256; *Alaverdi-
 Kafan*, volcanic ore deposits, 75-3090
 —, AZERBAIJAN SSR, thermal props. of
 sandstones, 75-2741
 —, BYELORUSSIAN SSR, carbonate
 accumulation in lake basins, 75-367;
 Precambrian geol. and tectonics, 75-
 3636
 —, KAZAKH SSR, Zn-bearing montmor-
 illonite and cerdite, 75-1861; cappele-
 nite, 75-3468; roquesite, first USSR
 find, 75-1359; stratiform Cu-deposits,
 75-908; mineralization in Kurganskaya
 suite, 75-3816; tenerite, 75-3580; sedi-
 mentary Mn-ore, 75-1995; origin of
 Palaeozoic siliceous rocks, 75-2267;
Avacha Volcano, ultramafic xenoliths,
 75-3178; *Dzhalaïr-Nayman*, structure of
 zone, 75-3839; *Dzhezkazgan* deposit,
 rhenium in, 75-910; *Karaoba* deposit,
 zoning of greisen mineralization, 75-
 945; *Kent* deposit, milarite, 75-3020;
 carpholite, 75-3491; *Lake Balkhash*,
 age of lake, 75-2822; zircons from
 granites, 75-439; *Lesser Karatau*, V-
 bearing plthanite, 75-320; cherty
 rocks in phosphorite suite, 75-1561;
Turgay, bauxite, origin, 75-214; *Ultau*,
 classification of Precambrian granitoids,
 75-2824
 —, RUSSIAN SFSR, origin of boulder clay,
 75-1548; *Aldan*, oxygen in Archaean
 atmosphere, 75-2315; age of marble, 75-
 10; *Altai*, granitoid plutons-hornfels
 contact, trace elements, 75-387; *Amur*,
 tin-bearing granites, 75-2212; *Anabar
 shield*, Popigay graben, Palaeogene
 basalts, 75-8; *Artemovskii deposit*,
 liquid inclusions in halite, 75-546; *Baikal*,
 blue calcite, 75-3048; fine-grained biotite
 granite pluton, 75-332; phyllites in meta-
 morphic zones, 75-1191; *Baltic area*,
 metabentonite mixed-layer formations,
 75-2962; *Bashkiria*, manganese in evo-
 porite beds, 75-2026; *Borshchovochnyi
 ridge*, miarolitic pegmatites, 75-567;
Bureya trough, marine sediments and
 coal measures, 75-1559; *Buryat*, gahnite
 in leucocratic granites, 75-3538; *Car-
 pathians*, chambersite, 75-1382; *Caucasus*,
 clay of Aktoprakskaya formation, 75-
 118; omphacite from metasomatites,
 75-1301; explosion breccia in chalcop-
 yrite deposit, 75-1500; metamorphic
 facies and zoning, 75-2714; *Chukotka*,
 Hg deposit, volcanic structure, 75-3638;
Ciscaucasia, tectonic evolution, 75-3637;
 Sermation clay, lithology and petrog.,
 75-1859; *Gornaya Shoria*, goldmanite,
 75-447; *Gornyi Ossetiya*, action of layer
 beam on volcanic rocks, 75-256; *Groznyy*
 magnetic high, 75-1446; *Gulinskaya* in-
 trusion, alkalic rocks, 75-2620; *Kam-
 chatka*, volcanoes, heterogeneities with
 reduced viscosity, 75-3735; earthquakes
 and volcanism, 75-3736; ore deposition,
 75-2027; native Hg in volcanic glass,
 75-512; quartz from pumice, 75-2453;
 gold in rocks and minerals, 75-2219;
 composition of basalts, 75-351; thickness
 of crust, 75-1501; *Kan-Taseyeva basin*,
 bromine in sylvine and halite, 75-3587;
 region extent of rinneite, 75-3588;
Karelia, hastingsite from charnockite,
 75-3487; zircon in metasedimentary
 rocks, 75-438; amino acids and sugars
 in Precambrian rocks, 75-2206; *Kerch
 peninsula*, tincalconite from mud cones,
 75-543; *Khabarovsk Kray*, garnets in
 Late Mesozoic extrusives, 75-445;
Khibina, khibinskite, new mineral, 75-
 556; *Khingan*, tin ore deposit, 75-209;
Khovu Aksy deposit, age of Ni-Co
 mineralization, 75-2825; *Kodar Range*,
 staurolite-chlorite-muscovite meta-
 morphic subfacies, 75-2713; *Kodar-
 Odokan*, plutonic rock association, 75-
 3680; *Kola Peninsula*, colour of ussingite,
 75-3526; zirsinalite, new mineral, 75-
 2532; koashvite, new mineral, 75-2524;
 laplandite, new mineral, 75-2525; phos-
 inaite, new mineral, 75-2526; metamict
 zircon, 75-440; migration of gold in
 metamorphic rocks, 75-1192; nitrogen
 and hydrocarbon gases in ultramafic
 rocks, 75-3415; *Kovdor*, dissociation
 textures in magnetite, 75-3541; *Kurile I.*,
 crustal movements, 75-3647; molyb-
 denite from volcanic rocks, 75-528;
Mendeleyev volcano, pyrite ore, 75-977;
Kurile Is. and *Lesser Caucasus*, U, Th, K
 in Cainozoic basalt, andesite and dacite,
 75-352; *Kurile-Kamchatka*, chem. and
 depth of seismofocal layer, 75-3737;
 Cainozoic volcanic province, basalt and
 andesite, 75-349; *Kuznetsk Altai*, para-
 rammelsbergite, 75-529; *Lena basin*,
 concretions in Mesozoic, 75-1560; *Lovo-
 zero massif*, penkvilskite, 75-1394;
 kazakhovite, 75-1392; sazhinite, 75-
 1396; umbozerite, 75-1398; *Morsovsk*
 evaporite beds, potassium salts, 75-
 2066; *Mugodzhars*, polygenetic chalcop-
 yrite deposits, 75-205; structure of
Kos-Istek area, 75-3634; *Noril'sk*, Pt-
 group minerals, 75-1968; Pt-Fe minerals,
 75-3533; *Noril'sk*, *Talnakh* & *Oktyabrsk*
 deposits, pentlandite from pyrrhotite
 ores, 75-525; *Oktyabr* deposit, palla-
 doarsenide, new mineral, 75-557; paolo-
 vite, new mineral, 75-558; telargpalite,
 new mineral, 75-2528; *Rudnyy Altai*,
 polymetal deposits, 75-213; *Sakhalin*
 fault, tectonic evolution, 75-3648; *Sarbai*
 iron ore deposits, vein minerals, 75-228;
Sayan, copper-fluorite mineralization,
 75-208; *Sette Daban*, diamond potential,
 75-3665; *Siberia*, new find of vimsite,
 75-3583; metasomatites in carbonate
 intrusions, 75-1599; chloritoid and
 staurolite in metapelite, 75-1631; kim-
 berlite, ultramafic inclusions, 75-594;
 peridotite, 75-2256; Cu-deposit
 associated with andesitic rocks, 75-
 3073; first USSR find of garronite, 75-
 1341; artesian basin, CO₂ in Jurassic
 sediments, 75-404; *West Siberian Plain*,
 chlorite cement in sandstones, 75-2667;
 authigenic plagioclase in productive
 deposits, 75-627; *Solongo* deposit,
 solongoite, new mineral, 75-559; *Staryy
 Oskol*, gold in Precambrian basement
 rocks, 75-210; *Talnakh*, Pt-Fe minerals,
 75-3533; *Taymyr*, zircon in granitoids,
 75-2398; *Tazheran* intrusion, troilite
 from skarn, 75-1357; *Southern Timans*,
 Brand I in ground water, 75-395; rutile-
 anatase leucoxene, 75-1350; *Tishinskoye*
 deposit, classification of pyrite, 75-1355;
Transbaikal, F and Cl in geological for-
 mations, 75-314; willyamite and breith-
 auptite, 75-706; regional metallogenic
 zoning, 75-946; age of epithermal
 fluorite deposits, 75-2823; K-feldspars
 in porphyritic rocks, 75-1324; Lr.
 Cretaceous trachybasalt, 75-1447; peg-

UNION OF SOVIET SOCIALIST REPUBLICS (contd.)

- matite fields, horizontal and vertical zoning, 75-3696; chem. zoning of ground water, 75-1195; *Irunovskii* ore deposit, minerals of supergene zone, 75-227; *Tunguska syncline*, ring dykes, 75-595; 'meteorite' origin, 75-2376, 2377; *Tur'ii peninsula*, mineral veins in fenites, 75-464; *Tuva*, metamorphosed Precambrian graphitic rocks, 75-513; *Tuymaz* testhole, composition of Precambrian basement, 75-7; *Urals*, genesis of manganese ores, 75-207; sedimentary manganese ore, 75-1995; garnet-bearing jasper, 75-1099; strain zones in vein quartz, 75-680; origin of quartz crystals, 75-3518; greywacke-Krak pluton contact, 75-642; Pt in dunite, 75-1994; rutheniridosmine, 75-3535; calcic amphiboles in gabbro-peridotite plutons, 75-1309, 2424; cyclic bedding of *Bakal* ironstones, 75-3791; *east Ural* uplift, geochem. zoning of tin, 75-324; *Vetluga R. Valley*, palygorskite soils, 75-117; *Vitim Mts.*, granitoids, volume factor, 75-3697; *Volga region*, drainage and chem. of ground water, 75-3410; *Volgograd*, Devonian reservoir rocks, 75-2974; *Yakutia*, tin placers, 75-3089; inclusions in olivine from kimberlite pipe, 75-437; Cr and Ti in garnets from kimberlite, 75-446; Cr-rich clinopyroxenes from kimberlites, 75-3474; formation of rich alluvial diamond placers, 75-244; diamond-bearing serpentinite, 75-1293; *Yenisei Ridge*, magnesium skarn and phlogopite, 75-643; *Zaangar'ya*, nepheline syenites with wöhlertite and titan-rozenbuschite, 75-460
 - , TADZHIK SSR, *Alai Range*, sodianite, 75-3020; *Karamazar* kiselite from Au-Ag ore, 75-3562; matildite, 75-1365; *Mogoltau* and *SW Karamazar*, hypogene mineralization, 75-947
 - , TURKMEN SSR, Permian volcanic rocks and molasse, 75-3635; *Kara Kum*, size of gas pools, 75-1003
 - , UKRAINIAN SSR, luminescence of diamonds, 75-1075; *Crimean Mts.*, mercury mineralization in Triassic volcanic rocks, 75-206; calcite, α -cristobalite, quartz in zoned chert concretions, 75-3792; neogenic gypsum, 75-535; *Donbas*, Pb isotopes in ores, 75-3341; kaolinite in Carboniferous coal measures, 75-119; *Donets basin*, ferrierite, 75-506; *East Azov*, gases in rock aeration zone, 75-3416; *Krivoy Rog*, Au in iron ore, 75-3338; metamorphosed crust of igneous rocks, 75-3840; *Lesser Caucasus*, Cretaceous clayey rocks, 75-120; *Ukrainian shield*, Archæan supercrustal rock associations, 75-664; weberite from metasomatic rocks, 75-1387; prosopite and its alteration products, 75-1386; *Volyn*, chamber pegmatites, 75-1808; He and Ar isotopes, 75-317
 - , UZBEK SSR, *Fergana*, palygorskite from Jurassic sediments, 75-2956
- UNITED STATES, early western continental margin, 75-2903 [62]; fuel and mineral wealth, 75-195; Precambrian iron-formations, 75-2014; metal provinces, 75-2005; rhenium deposits, 75-910; sediments on Atlantic continental shelf, 75-1589; W, Ir in batholithic rocks, 75-2236; SW, Permian copper shales, 75-908; E., current-controlled continental margin topography, 75-2903 [14]; SE, subaerial weathering of sand, 75-3812; NW, Cu mineralization in miogeosynclinal clastics, 75-908; *Appalachian Mts.*, carbonate rocks, 75-375; age of regional metamorphism, 75-1722; *Cascade Range*, stratovolcanoes, compositional variation, 75-3710; *Chesapeake Bay* sediments, 75-2981; *Columbia R.*, sediments, radionuclide content, 75-357; *Delaware R.*, estuarine sediments, 75-2981; *Leucite Hills*, wyomingite, 75-3172
- , ALABAMA, Wedowee group, stratigraphy and metamorphism, 75-3851; *Marion Co.*, and *Elmore Co.*, crystallized petrified wood, 75-3890; *Sand Mt.*, petrol. of carbonate core, 75-2669
 - , ALASKA, placer deposits, 75-220; palaeomagnetism of Jurassic rocks, 75-1668; hot springs, geol. and chem., 75-3412; *Alaska-Aleutian Range* batholith, chem. variations, 75-333; *Chulitna-Yetna*, geol. and mineral deposits, 75-956; *Duke I.*, petrol. of ultramafic rocks, 75-2572; *Eagle quadrangle*, ultramafic rocks, 75-2626; *Seward Peninsula*, hulsite, 75-1381; *Trans-Alaska* pipeline corridor, mineral resources, 75-957
 - , ARIZONA, mineral data, 75-1685; coal, oil, natural gas, helium and uranium reserves, 75-963; Cu, Mn and Zn in co-existing mafic minerals, 75-2423; microstructures of biologic origin, 75-1592; *Barringer* meteorite crater, metallic particles in impactite, 75-436; *Cheto*, montmorillonite, 75-80; *Gila Co.*, travertine, calcite onyx, and peridot occurrences, 75-2771; *Grand Canyon*, amphibole-bearing cumulate inclusions, 75-3712; *Hoover Dam*, Ti-pargasite, 75-3483; *Jerome*, massive sulphide deposits, 75-985, 986; *Mammoth mine*, yedinite, new mineral, 75-2531; creaseyite, new mineral, 75-3595; *Mohave Co.*, zeolites in tuffaceous rocks, 75-2460; *Ray*, chronology of intrusion and ore deposition, 75-745; *Ray* and *Esperanza* porphyry Cu deposits, S in biotite, 75-920; *Red Mt.*, explosion or erosion structure, 75-1508; *Rowley mine*, mineralization, 75-231; *San Francisco volcanic field*, K/Ar study of S.P. flow, 75-746
 - , ARKANSAS, *Hot Springs*, quartz, DTA, 75-3291
 - , CALIFORNIA, active continental margins, 75-2903 [63]; fire agate, 75-2194; history of gold mining, 75-718; Franciscan metamorphism, 75-1645, 1726, 2668; limestone and dolomite resources, 75-239; mercury in marine sediments, 75-1175; *Boron*, solution mining of borax, 75-3134; *Coast Range*, ophiolite, chem., 75-2652; mercury deposits, serpentine alteration, 75-964; *Crestmore*, merwinite, 75-1297; *Death Valley*, colemanite pseudomorphs, 75-2770; colemanite, 75-714; *Hot Creek Valley*, glasses in high alumina olivine tholeiite, 75-1484; *Hetch Hetchy Reservoir*, granitic rocks, 75-2573; *Imperial Valley*, geothermal resources, 75-3745; *Ione* formation, radioelement and trace elements in sandstones and clays, 75-374; *Kern Co.*, garfalsite, 75-544; *Leech Lake Mt.-Bass Mt.* region, geol., 75-1644; *Marin Co.*, lawsonite, 75-151; *Mendocino Co.*, wollastonite, 75-1895; *Mono Co.*, stable isotopes and chem. reactions during mineralization, 75-2207; trolleite, 75-894; *Monterey Bay*, glauconite, 75-3505; *Mt. Shasta*, picritic, volatile-rich magma, 75-1485; water in high-alumina magmas, 75-3746; *Pala*, Li-Al mica crystals from pegmatite 75-2431; *Plumas Co.*, copper belt, trace elements, 75-325; *Puente Hills*, palygorskite, 75-2441; *San Andreas Fault*, earthquake electrical resistivity variations, 75-1657; granitoid rocks, 75-574; *San Bernardino Co.*, mineralization and major structural features, 75-222; *San Francisco*, hydromagnesite, 75-1940; *San Jose*, jadeite in metagreywackes, 75-1646; *San Mateo Co.*, heavy mineral assemblages in sediments, 75-3811; *Santa Ana R.*, clays and clay minerals, 75-1876; *Santa Ynez Mts.*, facies relations in Eocene-Oligocene, 75-640; *Searles Lake*, schairerite, 75-3042; *Sierra Nevada*, contact metamorphosed ultramafic rocks, 75-653; hornblendes and biotites, 75-3490; Au-bearing river gravel, 75-2007; 'swelling' chlorite in Mesozoic formation, 75-96; *Sonoma Co.*, chromiferous kaolinite, 75-88; *Tanner Basin*, organic matter in marine sediments, 75-2276-2278; *Tulare Co.*, löllingite and black resuvianite, 75-1294; *Western Merced Co.*, calcareous concentrations in Corcoran clay, 75-2958; *White Mt.*, vermiculite, 75-95; petrog. of granitic bodies, 75-1483
 - , COLORADO, element movement to atmosphere from coniferous trees, 75-2329; authigenic albite and K-feldspar, 75-3510; silver in stream sediments, 75-2270; Middle Palaeozoic kimberlitic diatremes, 75-2560; *Clear Creek Co.*, geochem. anomalies, 75-1229; *Gateway*, petrol. of Cutler formation, 75-3808; *Gunnison Co.*, metasedimentary basement rocks, 75-2688; *Jamestown*, fluid inclusions in feldspar and gold deposits, 75-3070; *Kroenke* granodiorite, 75-1725; *Larimer Co.*, alabaster, 75-713; *Paradox Basin*, Br distribution and palaeosalinities, 75-2060; *Pegmatite Points*, Fe-bearing minerals in granitic rocks, 75-2628; *Piceance Creek Basin*, analcite, dawsonite in oil shale and tuff, 75-501; carbonates in oil shale, 75-1370; *Pike's Peak* batholith, 75-3711; minerals in granite, 75-2765; *Red Mt.* zunyite, 75-3142 (IV.6); *Rico*, geol. and ore deposits, 75-2006; *Rio Blanco Co.*, norstrandite, 75-3553; *San Juan* volcanic field, mineralization and calderas, 75-962; *Silver Cliff*, birnessite in obsidian, 75-1683; *Silverton*, mineralogy of altered San Juan formation, 75-988; *Summitville*, K/Ar dating of alunite, 75-743; *Teller Co.*, coloradoite, acanthite and jarosite, 75-223
 - , CONNECTICUT, metamorphism of micaceous limestones, 75-3849; *Tolland*, *Bergundy Hill* quarries and garnet mines, 75-2763
 - , FLORIDA, palygorskite-sepiolite deposits, 75-115; U isotopes in aquifer water, 75-1199; micro-textures on quartz and heavy mineral sand grains, 75-2671; *Apalachicola*, heavy mineral concentration processes, 75-3813
 - , GEORGIA, gem minerals, 75-310; kaolinite, 75-368; palygorskite-sepiolite deposits, 75-115; sedimentary kaolins, 75-100; Wedowee group, stratigraphy and metamorphism, 75-3851; opaline spheres, 75-3524; organic matter in river water, 75-406; *Climax Cave*, age and

UNITED STATES (contd.)

- sedimentation rate, 75-744; *coastal plain*, heavy minerals in sediments, 75-2672
- , HAWAII, olivines, CO₂ inclusions, 75-1285; gemstones and localities, 75-715; vesicular basalt, 75-2740; grey hydro-morphic soils, 75-2971; *Haleakala* and *West Maui* volcanoes, pyroxenes from, 75-3470; *Kilauea*, magmatic gas, 75-1503; chem. of east-rift lava, 75-3740; sublimates from lava fountains, 75-1162; *Mauna Kea*, hydrothermal origin of clays, 75-135; *Mauna Loa*, size of cone, 75-1504; *Salt Lake Crater*, eclogites, 75-1477; clinopyroxene from garnet pyroxenite, 75-1058; sulphides in garnet pyroxenite xenoliths, 75-3739
- , IDAHO, star garnets, 75-712; boron in illite from coal ash, 75-3375; budding-tonite in Phosphoria formation, 75-2451; element movement to atmosphere from coniferous trees, 75-2329; *Coeur d'Alene*, extension of mineral belts, 75-3092; *Emerald Creek*, inclusions in gem almandine, 75-3312; *Hall Mt.*, rare earths in thorium veins, 75-2215; *Moscow*, siderite in vesicular basalt, 75-2760; *Silver City*, acanthite and aguilarite, 75-3564
- , KANSAS, classification of shales, 75-639; *Lyons*, corrensite, 75-140; *Riley Co.*, crustal and upper mantle stratigraphy, 75-2629; heavy minerals in limestones, 75-1591
- , KENTUCKY, *Elliot Co.*, ilmenite from kimberlite pipe, 75-685
- , LOUISIANA, *Atchafalaya R. basin*, C isotopes in CaCO₃ nodules, 75-3390
- , MAINE, granitic plutons, age detn., 75-2842; *Baxter State Park* and *Mt. Katahdin*, geol., 75-2559; *Munsungun*, stratigraphy, 75-2558; *Oxford Co.*, mineral collecting, 75-709; *Stoneham*, inclusions in beryllonite, 75-2188
- , MARYLAND, alteration of chromite, 75-2474; *Cecil Co.*, pillow basalts, 75-1482
- , MASSACHUSETTS, pigeonite in metamorphic augites, 75-2417; *Loudville*, wroewolfeite, new mineral, 75-2530
- , MICHIGAN, copper province, 75-908; laminations in evaporite deposit, 75-2061; *Isle Royale*, Copper Harbour conglomerate, 75-1590; *Portage Lake* volcanics, 75-1461; *White Pine*, Parting shale, min. and geochem., 75-1150
- , MINNESOTA, apatite in early Precambrian rock, 75-538; overgrowths on detrital sand grains, 75-3520; *Giants Range* batholith, granite classification, 75-46; clinopyroxene from Keweenaw lavas, 75-2415; Ba in granites, 75-2285; *Biwabik* iron formation, geol. and stable isotopes, 75-2221; *Gunflint* iron formation, contact metamorphism, 75-2687; *Vermilion* greenstone belt, trace element geochem., 75-344
- , MISSISSIPPI, faulting and salt ridges, 75-3137; *inner coastal plains*, silty soils, clay mineralogy, 75-137
- , MISSOURI, *Butler Hill* granite, chem. weathering, 75-19; *Callaway Co.*, claypit area, geochem. anomalies, 75-1133; *Cornwall*, copper deposit, 75-987; *Decaturville* sulphide breccia, 75-623; *Ozark Dome*, dune sand, DTA, 75-3291
- , MONTANA, palaeomagnetism of Boulder batholith, 75-3876; *Beartooth Mts.*, jointing in mafic dykes, 75-3709; *Libby*, vermiculite, 75-815; *Little Belt Mts.*, *Barker quadrangle*, igneous rocks and mineral deposits, 75-1458; *Stillwater complex*, rhodium, platinum, and gold alloys, 75-3603; *Yellowstone R.*, moss agate, 75-2193
- , NEVADA, scheelite-powellite series, 75-1379; carbonate rock sequence, 75-3807; *Carlin* gold deposit, Ti-bearing orpiment, 75-527; frankdicksonite, 75-1390; *Humboldt Co.*, corderoite, new mineral, 75-551; *Lander Co.*, geochem. and fluid zonation, 75-1232; *Snake Range*, Ba in hybrid rocks, 75-2241; *Steamboat Springs*, argillization by descending acid, 75-138; *Tonopah*, *Comstock Lode*, and *Goldfield*, oxygen isotope ratios, 75-2208
- , NEW HAMPSHIRE, coexisting actinolite and hornblende, 75-468; *Conway* and *Albany*, microlitic minerals, 75-2762; *Gilsum*, beryl, 75-2761; *Keene*, helicoidal fractures in gedrites, 75-1649; *Newport*, *Smith mine*, hurlbutite, 75-1946; *North Groton*, bjarebyite, 75-181; *Palermo quarry*, whitlockite, 75-1943
- , NEW JERSEY, *Franklin*, origin of zinc deposits, 75-2042; wollastonite and bustamite, 75-3478; zinc-rich chlorites, 75-3592; metamorphic history of *NE Reading* prong, 75-1643; *Sterling Hill*, chalcophanite, 75-264
- , NEW MEXICO, major element variation in basalts, 75-2246; Sr ratios in olivine-tholeiite basalt, 75-2249; *Carlsbad* potash district, ore controls, 75-2063; *Red-rock*, serpentine rock, 75-2196; *Rio Brazos*, trondhjemite, 75-1725; *Santa Rita*, formation of breccia pipes, 75-1509
- , NEW YORK, prehnite and pumpellyite-bearing mineral assemblages, 75-1642; pigeonite in metamorphic augite, 75-2417; sulphur isotopes in sulphates and sulphides, 75-1183; *Barton mine*, 75-710; inclusions in gem almandine, 75-3312; *Gouverneur talc mine*, sepiolite, 75-3275; *Hudson R. estuary*, sediments, 75-2981; *Lewis* and *Essex Counties*, gem labradorite, 75-2195; *New York City*, petrochem. of Manhattan formation, 75-3398; *Oneida Lake* ferromanganese concretions, 75-1146; *Orange Co.*, warwickite, 75-884; metamorphic history of *NE Reading* prong, 75-1643; *Rochester*, origin of marl deposit, 75-3806; *Sucker Creek Canyon*, agate collecting, 75-2192
- , NORTH CAROLINA, gold deposits, 75-2003; topography, geol., mineral resources, 75-2768; sand from piedmont, 75-3810; *Alexander Co.*, emerald deposits, 75-3310; *Bald Knob*, kellyite and grove-site, 75-2523; *Castle Hayne*, vivianite nodules, 75-2516; *Cowee Valley*, *Shuler* ruby mine, 75-2182; *Davie Co.*, orbicular rocks, 75-604; *Durham*, apophyllite, prehnite and gyrolite, 75-2769; *Granville Co.*, igneous rocks, 75-3677; *Kings Mt.*, *Footo mine*, messelite, 75-540; *Madison Co.*, scheelite in soapstone deposits, 75-960; *Middle Atlantic Bight*, coastal barrier sediments, 75-1593; *Pamlico R. estuary*, clay minerals in sediments, 75-2982; *Rowan Co.*, hydrothermal zeolite assemblage, 75-652
- , OHIO, Silurian rock salt, 75-996; use of clay in rubber industry, 75-822; *Lake Erie basin*, mercury in sediments, 75-1170
- , OKLAHOMA, Flowerpot shale, mixed-layer clay mineral, 75-845; weathering of shales, 75-139; *Payne Co.*, low altitude gamma-ray spectrometry, 75-3418
- , OREGON, continental margin, structure and stratigraphy, 75-2903 [19]; *Cascade Range*, near-event seismic activity, 75-3743; *Coast Range*, Yachats basalt, 75-1459; *Grant Co.*, levynite-offretite intergrowths in basalt, 75-507; *John Day* formation, physical stratigraphy, 75-585; *Malheur Co.*, chert in lacustrine deposit, 75-1588; *Newport*, blue agate, 75-2191; *Plush*, transparent plagioclase, 75-1107
- , PENNSYLVANIA, quarries, 75-2764; prehnite and pumpellyite-bearing mineral assemblages, 75-1642; mercury in sedimentary rocks, 75-1177; alteration of chromite, 75-2474; coalification patterns in coal basins, 75-2668; *Cornwall*, Triassic magnetite deposit and diabase, 75-2043; *Honey Brook* anorthosite, 75-1481; *Limerick*, palygorskite in calcite veins, 75-2983; *Nittany Valley*, carbonated ground waters, 75-1198
- , SOUTH DAKOTA, *Big Chief* pegmatite, metavanite, 75-1393; whitmoreite, 75-1399; *Custer Co.*, agates, 75-711; jahnite, 75-895; *Homestake* gold deposit, Precambrian sedimentary rocks, 75-193
- , TENNESSEE, *Monroe Co.*, gold deposits, 75-2002
- , TEXAS, fluorspar occurrences, 75-2050; extraction of sulphur, 75-2069; bentonite, 75-368; *Baffin Bay*, subtidal Holocene dolomite, 75-2675; *Christmas Mts.*, melilite replaced by idocrase in skarn, 75-644; *Delaware Mts.*, chalcedony replacing fossils, 75-3521; *Trans-Pecos*, *Eagle Mts.*, geochem. of igneous rocks, 75-1164; *Guadalupe delta*, clay minerals in sediments, 75-1875; *Hudspeth* and *Culberson Co.*, asbestos in talc dist., 75-995; *Karnes Co.*, geol. of oxidised ore deposits, 75-2004; *Lincoln* and *Russell Co.*, Bentonite Marker bed, 75-844; *Pecos Co.*, cryptoexplosion structure, geol., 75-1283; *Terlingua*, pinchite, new mineral, 75-3602
- , UTAH, red beryls, 75-1084; voids in feldspars, 75-3809; *Bingham*, igneous rocks, 75-1486; *Can Creek* anticline, folding in evaporites, 75-3778; *Duchesne Co.*, magnesioarfvedsonite, 75-470; *Fisher Towers*, petrol. of Cutler formation, 75-3808; *Great Salt Lake*, ooids in marine limestones, 75-3575; salt economics, 75-2062; *Paradox basin*, shelf carbonate sedimentation, 75-2673; Br distribution and palaeosalinities, 75-2060; *Spor Mt.*, Be deposits, hydrothermal alteration, 75-2217; *Uintah Co.*, garselsite, 75-544
- , VERMONT, coexisting metamorphic calcite and dolomite, 75-384; grossular-spessartine overgrowths on almandine, 75-442
- , VIRGINIA, thermal spring waters, 75-1212; voids in feldspars, 75-3809; mineral and fossil localities, 75-1684; prehistoric trade patterns from soapstones, 75-3326; *Amelia*, twinned albite, 75-3284; *Clark's Cave*, gypsum replaced by chalcedony, 75-1367; *Clarke*, *Frederick*, *Page*, *Rockingham*, *Shenandoah*, *Warren Co.*, high-silica resources, 75-992; *Floyd Co.*, Co and Fe-rich violarites, 75-2496; *Otter R.*, metamorphosed supracrustal assemblage, 75-674; *Piedmont*, abandoned Cu, Pb and Zn mines, 75-958; geophysics. data and rock types, 75-1664; *Saltville*, mineralogy of Maccrady formation, 75-2984;

UNITED STATES (contd.)

- Staunton quadrangle*, Zn, Pb and Cu reconnaissance, 75-1231
- , WASHINGTON, K/Ar ages of Similkameen batholith and Kruger alkalic complex, 75-2841; *Cascade Mts.*, tremolite and hornblende miscibility, 75-3482; hydrothermal alteration at *Middle Fork copper prospect*, 75-2044; *Mt. St. Helens volcano*, recent and future behaviour, 75-3742; *Pullman*, siderite in vesicular basalt, 75-2760; N.R.M. in *Tatoosh* granodiorite, 75-2750; *Twin Sisters* dunite, chromite alteration, 75-517
- , WISCONSIN, dora dolomitization model, 75-3805; Harebell formation and Pinyon conglomerate, 75-961
- , WYOMING, montmorillonite, 75-80, 368; exchangeability of K in montmorillonite, 75-2952; authigenic albite and K-feldspar, 75-3510; Middle Palaeozoic kimberlitic diatremes, 75-2560; pyrite from Green River formation, 75-1890; *Bighorn Mts.*, Precambrian K/Ar dates, 75-1724; plagioclase in metadolerite dykes, 75-494; *Converse Co.*, Highland uranium deposit, 75-1147; *Fremont Co.*, *South Pass*, geol., 75-1437; *Laramie Range*, geochem. of Precambrian rocks, 75-742; *South Pass*, RE in Archaean volcanic rocks, 75-34; *Wind R. Canyon*, greenstone belt, 75-3848; *Yellowstone Nat. Park*, pre-Tertiary rocks, geol., 75-1460; hot springs, 75-399; chem. anal. of thermal waters, 75-401
- UPPER VOLTA, *Ouahigouya*, granitic suites, 75-3667
- Urals*, Russian SFSR v. USSR
- Uraninite, mineralization, 75-518; alteration by dilute acids and bases, 75-1228; *France*, 75-3102; in granites, 75-3346; *Germany*, 75-937; new occurrence, 75-969; *Switzerland*, 75-938; *Western Australia*, 75-3886; *Wyoming*, 75-1147; *Canada*, 75-1148
- Uranium, mineralization, 75-518; radio-metric detn., 75-2899; detn. by neutron activation anal., 75-780; detn. by delayed neutrons, 75-782; polarographic anal. in ores, 75-1793; geochem. and radio-metric behaviour, 75-3339; in kimberlites, 75-2255; distribution in basalt, ignimbrite and syenite by f-radiography, 75-353; in marine baryte, 75-2216; incorporation in modern coals, 75-321; control and distribution in coral reefs, 75-3382; in meteorites, 75-1259; in Venusian rocks, 75-3327; *Cornwall*, in granite aureole and greenstones, 75-3352; *Scotland*, mineralization, 75-1981; *North Sea*, mining from sediments, 75-200; *France*, primary mineralization, 75-3102; mineralization in granitic region, 75-323; transport in granites, 75-3689; *Sweden*, in alum shale, 75-3377; *Poland*, in Cambrian-Ordovician sediments, 75-203; USSR, isotopes in *Lake Balkhash*, 75-2822; Russian SFSR, Cainozoic basalt, andesite and dacite, 75-352; *Arizona*, resources, 75-963; isotopes in *Florida* aquifer water, 75-1199; *Canada*, geochem., 75-2323; *New Brunswick*, in stream sediments, 75-413; *N-W Territories*, in lake sediments, 75-416; *Brazil*, in K-rich rhyolites, 75-2239
- deposits, origin by continental weathering, 75-1964; age of Au-U placers, 75-3087; *Czechoslovakia*, selenides from, 75-3085; *Egypt*, two-stage ore concentration, 75-1959; *Texas*, geol. of oxidised deposits, 75-2004; *Wyoming*, geol. and geochem., 75-1147; *Canada* and *Gabon*, heavy rare gases in, 75-2318
- minerals, calcouranoite, 75-548; *Germany*, 75-935
- Uranothorite, USSR, 75-212
- Uricite, *Western Australia*, 75-3886; and *Peru*, new organic mineral, 75-553
- URUGUAY, Recent sediments, 75-2903 [12]
- Ussingite, crystal structure, 75-3017; bonding effects, 75-3018; *Greenland*, 75-3582; and Russian SFSR, natural colours, 75-3526
- Utah v. USA
- Uttar Pradesh v. India
- Uvarovite v. garnet
- Val Malenco* v. Italy
- Valence-bond distributions in ionic structures, 75-1887
- Valentinite, *Greenland*, 75-1397, 2497
- Vanadinite, *Arizona*, 75-231
- Vanadium, XRF detn. in ilmenite, 75-1783; photometric detn. in magnetite, ilmenite, chromite, igneous rocks, 75-1761; detn. in iron ore by AAS, 75-1760; emission spectrographic detn. in silicate rocks, 75-1796; trace anal. from phosphorites, 75-2879; in phthanite, 75-320; *France*, in sediments, 75-3376; *Italy*, abundance in volcanic rocks, 75-2252; *Sweden*, in alum shale, 75-3377; *India*, in apophyllite, 75-487; *Queensland*, in bauxites, 75-2227
- minerals, *China*, black shale, 75-2403
- Vancouver I.*, BC v. Canada
- Variscite, cutting and polishing, 75-21; *Cape Verde I.*, in phosphatic rock, 75-2517; *Western Australia*, 75-3886; avian-derived deposits, 75-1002
- Vashegyite, kaolinite-type structure, 75-182
- Vaterite, synthesis, 75-1046; in human pathology, 75-2515
- Vauxite, related to montgomeryite, X-ray, 75-1377
- Velocity anisotropy in upper mantle, *Italy*, 75-699
- VENEZUELA, *Guri*, cordierite gneisses, 75-675
- VENUS, review, 75-2784; U, Th, K, in rocks, 75-3327
- Vermiculite, order-disorder relations, 75-1825; transformation from chlorite, 75-819; mica-derived, unstable intermediates, 75-106; weathered phlogopite, 75-3497; detn. on soils by cation exchange capacity, 75-796; iron oxidation and reduction effects, 75-797; ESR spectrum of Mn²⁺, 75-1819; fission particle tracks, 75-3507; oxygen K absorption spectra, 75-2986; Na- and K-interstratified forms, 75-3281; reaction with sea-water, 75-2936; saturated with 1-ornithine cations, Fourier analysis, 75-294; vermiculite-piperidine complex, structural investigation, 75-111; *India*, anal., 75-1817; *Japan*, interstratified with chlorite, 75-1862; interstratified with biotite, 75-93; thermal transformation, 75-94; *New Caledonia*, 75-3504; *California*, fixed cation interaction and osmotic swelling, 75-95; *Montana*, mineralogy and cation exchange props., 75-815
- Vermont v. USA
- Vesuvianite v. idocrase
- Vesuvius v. Italy
- Veselyite, *Japan*, variety arakawaite, crystal chem., 75-180
- Villamaninite, *Spain*, X-ray, DTA, 75-3563
- Villiaumite, in system apatite-nepheline-villiaumite, 75-1071; in system nepheline-villiaumite-lithium fluoride, 75-252; *Greenland*, 75-3582
- Vimsite, Russian SFSR, new find, anal., opt., X-ray, DTA, 75-3583
- Violarite, *Western Australia*, in Ni-sulphide ore deposit, 75-2495; *Ontario* and *Manitoba*, inclusions in pentlandites, 75-3557; *Virginia*, Co and Fe-rich, 75-2496
- Virginia v. USA
- Viridine v. andalusite
- Viscosities, of slags, 75-2090; of magmatic silicate liquids, 75-2088, 2089, 3156
- Vitritine, reflectance measurements, 75-2668
- Vivianite, *North Carolina*, white and blue nodules, 75-2516; *South Dakota*, meta-vivianite, new polymorph, 75-1393
- Vlasovite, structure refinement, 75-1888; *Quebec*, 75-3492
- Volborthite, USSR, ferruginous, DTA, anal., opt., X-ray, 75-541
- Volcanic activity, forecasting eruptions, 75-3733; global increase during Quaternary, 75-3762; thermal instability during magma flow, 75-2630; intensity of andesitic eruptions, 75-3715; submarine, on long range sonographs, 75-608; *Ireland*, Caradocian, 75-578; *Iceland*, *Heimaey* and *Surtsey*, Sr isotopes and RE elements in, 75-1155; Russian SFSR, *Kurile-Kamchatka arc*, chem. and depth of seismofocal layer, 75-3737; *Kamchatka*, 75-3735, 3736 conglomeratic breccia dykes, 75-3738; *Azores*, basaltic magmas, 75-1491; *Canary Is.*, field relations, 75-605; *Aeolian Is.*, microtremors and explosions, 75-3724; *Sudan*, setting and significance, 75-1498; *Ethiopia*, 75-3729; *Zaire*, 1971-1972, 75-3731; *Hawaii*, heavy radioisotope behaviour, 75-1156; *Halea Kala* and *West Maui*, pyroxenes, 75-3470; *Kilauea*, magmatic gas, 75-1503; sublimates from lava fountains, 75-1162; *Missouri*, Cambro-Ordovician mud volcano, 75-623; *Oregon*, near-event seismic activity, 75-3743; *Washington*, *Mt. St. Helens*, 75-3742; *Quebec Horne mine*, volcanic origin, 75-981, 982; *Central America*, 1961-1972, 75-3751; fumarole incrustations, 75-606; *Costa Rica*, *Arenal*, volume, energy, cyclicity of eruptions, 75-3758; *Guatemala*, *Santiago*, pattern and activity mechanism, 75-3756; nuée ardente, 75-3757
- arcs, *West Indies*, ages, 75-2843
- ash, *Italy*, base surge deposits, 75-3720; *Nicaragua* and *Guatemala*, 1971 and 1973 eruptions, 75-3749, 3750
- calderas, *Colorado*, mineralization, 75-962
- fragments, *South Africa*, in Karroo greywackes, 75-3798
- gases, *Central America*, Cl, F and SO₂ in, 75-3753
- lava, *Cape Verde Is.*, 1951; *Fogo* eruption, 75-2639
- liquids, *Galapagos Is.*, sulphur on vents, 75-1507
- rocks, melting patterns, 75-3177; action of laser beam on, 75-256; alkali feldspar in liquid equilibrium, 75-2164; felsic rocks related to Archaean sulphide ores, 75-1971; RE elements in Archaean greenstone belts, 75-345; *Cornwall/Devon*, Upper Palaeozoic, age, 75-2806; *Scotland*, in *Clyde plateau*, 75-1439;

- canic activity (*contd.*)
- Ireland*, 75-588; *France*, chem. and K/Ar ages, 75-1704; Quaternary basaltic lava flows, 75-3717; *Italy*, geochem., 75-2252; Ti content, 75-2253; containing clinopyroxene inclusions, 75-1442; glassy inclusions in quartz, 75-1333; *Greece*, Sr isotope ratios, 75-3358; petrol. and geochem., 75-3726; *Turkey*, 75-2550; division of types, 75-2604; *Czechoslovakia*, 75-1444; Cainozoic, trace elements, 75-1163; *USSR*, Permian association, 75-3635; *Russian SFSR*, molybdenite from, 75-528; *Atlantic Ocean*, isotopes and trace elements, 75-2245; *Canary Is.*, dating, stratigraphy and polarity history, 75-729, 2831; *Yemen and Aden*, opaque minerals in, 75-1349; *Iran*, related to tectonics, 75-3672; *South Africa*, Karroo, stratigraphy, 75-3670; *Japan*, acidic, 75-584; weathering processes, 75-127; *Mongolia*, 75-2568; *Tasmania*, Cambrian-Ordovician relationships, 75-1454; *Victoria*, Cainozoic, K/Ar dating, 75-1716; *Papua New Guinea*, Sr isotope study, 75-2242; petrog. and geochem., 75-1455; *Michigan*, 75-1461; *Minnesota*, Archaean, trace element geochem., 75-344; *Canadian Shield*, sulphur content, 75-315; *Ontario*, palaeomagnetic reversal, 75-1670; *Keweenaw*, 75-3676; *Valley of Mexico*, 75-3747
- caniclastic material, *South Africa*, in Karroo and Beacon rocks, 75-3797
- cannism, book, 75-2902; *Antarctica*, effect on water chem., 75-3409
- canoës, introductory text, 75-2914; height and plate thickness, 75-3763; conical, sizes, 75-1504; *Russian SFSR*, *Khanger*, quartz from pumice, 75-2453; *Mendeleyev*, pyrite ore, 75-977; *Kenya*, *Eburra*, rock sample population, 75-3732; *New South Wales*, *Warrumbungle*, phonolite-trachyte spectrum, 75-3707; *Pacific Ocean*, volumes, 75-1505; *Papua New Guinea*, 75-1524
- clume changes in deformed rocks, 75-2554
- nsenite, compared with paigeite, 75-1381
- ad ores, *South Africa*, flotation tests, 75-3123
- ngerite, solid solution, 75-3236; isostructural with $\text{Cd}_2(\text{PO}_4)\text{F}$, 75-3058
- ALES, ages of mineral localities, 75-1703; Upper Palaeozoic and post-Palaeozoic rocks, 75-65; Upper Carboniferous sedimentation, 75-620; Westphalian (Coal Measures) sequence, 75-619; Permian and Triassic deposits, sandstones, marls, 75-621; glacial sediments, 75-1539; boreholes, 75-1401; waste disposal and ground water pollution, 75-2316; *S.*, geochem. of corals, 75-354; Lr. Carboniferous limestone, palaeo-environment, 75-379; Namurian lithofacies, 75-618; *S. Wales coalfield*, carboniferous shales, palaeoenvironments, 75-355; *central*, preliminary metallic reconnaissance, 75-201; *Glamorgan*, hematite deposits, 75-621
- , DYFED, *Cardigan*, Pb-Zn veins, 75-932, GWYNEDD, *Snowdonia*, *Cwm Dilyn* rhyolite, 75-1490; *Anglesey*, *Parys Mt.*, metallogenesis in southern Caledonides, 75-1982
- arwickite, *New York*, crystal structure, 75-884
- ashington v. USA
- ater, estuarine, chemical mass-balance, 75-1211; fresh, buffering of dissolved silicon, 75-1207; coastal, organic mercury compounds in, 75-1210; natural, F content, 75-2293; mixing with lava, 75-1502; municipal supply, asbestiform amphiboles in, 75-1201; gas chromatographic detn. in clay minerals, 75-1820, 1821; composition patterns in folded mountain belts, 75-2291; water-mass tracer, 75-2303; thermodynamics of mixtures with CO_2 , 75-3155; in hydro-sodalite structure, 75-1910; interaction with goethite and amorphous hydrated ferric oxide, 75-266; solubility in silicate melts, 75-253; in basic and ultrabasic magmas, 75-1015; rock-water systems, 75-1017; amorphous solid, X-ray study, 75-1952; neutron diffraction study, 75-2996; continuous random network model 75-2997; in rusty lunar rock, 75-1253; in comet Kohoutek, 75-2374; *Antarctica*, natural, effect of volcanism on chem., 75-3409; *USA*, meteoric, in magmas, 75-402; *California*, in high-Al magmas, 75-3746; *N-W Territories*, quality studies, 75-2299
- , ground, benzene and toluene in, 75-405; *England and Wales*, pollution from waste disposal, 75-2316; *USSR*, vertical chemical zoning, 75-1195; *Russian SFSR*, Br and I distribution, 75-395; drainage and chem., 75-3410; *Sinai Desert*, hydrology, 75-1200; *Saudi Arabia*, Na and K content, 75-397; *Pennsylvania*, carbonated, stable carbon isotopes, 75-1198; *Ontario*, chem. variations, 75-394; water flow systems, 75-1213
- , interstitial, extraction, 75-801; release from Recent sediments, 75-750; *Israel*, chem., 75-3405; *Pacific Ocean*, Mn in, 75-3406; *Canada*, chem., 75-3404; alkalinity, 75-3403
- , sea, reaction with oceanic crust, 75-1129; diffusion of ions, 75-391; carbonate solubility, 75-390; RE elements in, 75-1144; uptake of Mg in coral reefs, 75-3383; supersaturated, retention of CaCO_3 , 75-3225; CaCO_3 dissolution kinetics, 75-3226, 3227; accumulation of fossil CO_2 , 75-1218; reaction with vermiculite and montmorillonite, 75-2936; hydrocarbons and mineral particles in, 75-1215; sulphidic, organic and inorganic trace metal complexes, 75-1208; Sr isotopic composition during Phanerozoic, 75-1197; DDT adsorption to suspended particles, 75-1196
- , spring, *Italy*, sulphate isotopic analyses, 75-1205; *Florida*, U isotopes in, 75-1199; *Virginia*, chem. equilibrium, 75-1212
- , thermal, *New Zealand*, chem., 75-2292; *Yellowstone Nat. Park*, chem. anal., 75-401
- Waxes, in soils, 75-2907 (6)
- Weathering processes, *Japan*, of volcanic eruptives, 75-127
- Weberite, *Ukrainian shield*, from metamorphic rocks, anal., opt., X-ray, 75-1387
- Weddelite, in human pathology, 75-2515
- Weipa, *Queensland v. USA*
- Wells, *Norfolk*, records, 75-2543
- Wenkite, crystal structure, 75-160
- Wernerite v. scapolite
- WEST INDIES, allophane soils, 75-2973; *Barbados*, transformation of marine sediments, 75-3378; calcareous crust profiles, 75-2676; *Great Bahama bank*, high-Mg calcite in lime muds, 75-2677; *Haiti*, ore deposits, 75-3096; *Lesser Antilles* island arc, strongly undersaturated magmas, 75-1519; *Martinique*, ages of granitic arcs, 75-2843; *Netherlands Antilles*, biochem. and geochem. of salt pan, 75-2282; diagenesis of carbonate sediment, 75-2678; *St. Kitts*, geochem. of pyroclastic succession, 75-3759
- Whewellite, gemstone, opt., 75-1111; in human pathology, 75-2515
- Whitlockite, meteoritic, rare gases in, 75-3437; in mesosiderites, 75-3440; in human pathology, 75-2515; *Western Australia*, 75-3886; *New Hampshire*, crystal structure, 75-1943
- Whitmoreite, new mineral, *South Dakota*, X-ray, 75-1399
- Wicklow v. Ireland
- Wightmanite, crystal structure, 75-884
- Willemite, gemstone, 75-1104; crystal chem., 75-3241; *Russian SFSR*, anal., 75-227
- Willyamite, *Russian SFSR*, 75-706
- Witherite, synthesis, 75-2113; witherite-calcite fractionation, 75-271
- Wittichenite, *Greece*, 75-2022; *Japan*, anal., 75-531
- Witwatersrand v. South Africa
- Wodginite, *SW Africa*, anal., X-ray, 75-2476; *Australia*, composition and structure, 75-882
- Wöhlerite, *Russian SFSR*, varieties in nepheline syenite, anal., opt., X-ray, 75-460
- Wolframite, *Germany*, 75-1985; *China*, 75-2032, 3108; *Queensland*, ferberitic, 75-1366; pipe-like deposits, 75-2033
- Wollastonite, synthesis, 75-1060, 2095; formed from calcite and quartz reaction, 75-3259; phase relations, 75-1073; 3258; dissolution in $\text{H}_2\text{O}-\text{CO}_2$, 75-1059; parawollastonite-wollastonite transition, 75-282; *India*, paragenesis in metamorphic terrain, 75-3843; *New South Wales*, 75-3112; *California*, polytypism and stacking disorder, 75-1895; *New Jersey*, compositional limits, 75-3478; *Texas*, in skarn, 75-644
- Wölsendorfite, anal., opt., X-ray, 75-3551
- Wroewolfeite, *Massachusetts*, anal., X-ray, opt., 75-2530
- Wulfenite, *Arizona*, 75-231
- Wurtzite, anharmonic thermal vibrations, 75-3036
- Wüstite, lattice parameters at high temps., 75-3202
- Wyoming v. USA
- Wyomingite, crystallization temperature, 75-3172
- Xenoliths, fused, fluid migration, 75-1465; *France*, ultramafic, chem. variation, 75-3690; acid, melting into basanites, 75-2596; *Hawaii*, sulphides in, 75-3739
- Xenotime, geothermometer, 75-2330; *Mozambique*, 75-3586; *China*, 75-3108
- Xingzhongite, *China*, new mineral., anal., X-ray, opt., 75-2522
- Xocomecatite, *Mexico*, new mineral, anal., opt., X-ray, 75-3606
- Xonotlite, *Czechoslovakia*, in gabbro-peridotite massif, 75-787
- X-rays, soft, detn. of S in coals, 75-1785; topography of fluorite, 75-2518; refinement technique, 75-1880; intensity ratios for $K\beta/K\alpha$ radiation, 75-774; texture goniometer, 75-755; fabric analysis, 75-752; instruments, radiation from, 75-2893; composition of pyrrhotite, 75-524; pyrrhotite pole figures,

X-rays (*contd.*)

- 75-1358; powder photographs of hungtsaoite, 75-2481
- diffraction, back reflection, 75-2866; smearing clay on glass slides, 75-793; flat powder mounts in contact with liquid, 75-754; distinction between detrital and secondary quartz, 75-2867; data for β -Al₂TiO₅, 75-3024; clays, heating sample plate, 75-2919; effect of separation method, 75-2918; result variation with sample size, 75-2916; thermal expansion of kaolinite and illite, 75-2730; weathering of phlogopite, 75-3497; dawsonite in shale, 75-2868; NaH₂AsO₄ · H₂O, 75-3032; structures of KHCO₃ and KDCO₃, 75-1941; heat treatment of asbestos, 75-1313; application to mineral exploration, 75-913; study of London Clay, 75-795; energy-scanning, liquid structure analysis, 75-853; butylammonium complexes of phyllosilicates, 75-110; *Gulf of Mexico*, fine-grained sediments, 75-1741
- fluorescence analysis, X-ray interaction data, 75-1780; automatic sample preparation, 75-773; theoretical correction procedures, 75-50; matrix effects in solution analysis, 75-49; trace element anal., background corrections, 75-2891; powders, evaluation and correction of interferences, 75-2890; powder pellets of small quantities of material, 75-47; accuracy of metal analyses, 75-44; imperfect absorption in light element samples, 75-776; detn. of Nb, Zr, Mn, Cr, V, Ca in ilmenite, 75-1783; standard rocks and minerals, 75-2341; base metal sulphides, 75-2892; ore samples, 75-912; Ca in ores, 75-1781; classification of granites, 75-46; Zr in granites, 75-45; Fe in phosphate rock, 75-1782; F in ceramics and raw materials, 75-1784
- spectrometry, book, 75-785; line interference corrections, 75-48; Cl in concrete by borate fusion, 75-777

Yangtze R. v. China

Yanzhongite, *China*, new mineral, anal., X-ray, opt., 75-2522

Yeast, fractionation of sulphur isotopes, 75-1128

Yedlinite, crystal structure, 75-1928;

Arizona, new mineral, opt., 75-2531

Yellowknife, *NWT v. Canada*

Yellowstone National Park, *Wyoming v. USA*

YEMEN, opaque minerals in Tertiary volcanic rocks, 75-1349

Yinnietharra, *WA v. Australia*

Yixunite, *China*, new mineral, anal., X-ray, opt., 75-2522

Yttrialite, natural and synthetic analogues, X-ray, 75-303

Yttrium, geochem., Ca-Y in minerals and rocks, 75-1127

Yttrium aluminium garnet, crystal growth, 75-1004

Yttrotitanite, *USA*, 75-212

YUGOSLAVIA, Cr-bearing halloysites, IR study, 75-1824; *Bosnia, Kulashi*, suolunite 75-1306; *Dinarides*, gabbros in ultramafic massif, 75-3695; *Prilep*, ruby, 75-1079

Yukon v. Canada

ZAÏRE, *Kamoto*, copper deposit, 75-976;

Lake Kivu, chem. of hydrothermal fluids, 75-1209; *Nyiragongo*, andremeyerite, new mineral, 75-3589; recent volcanic

activity, 75-3731; *Shaba*, copper-bearing strata, 75-908; limestones and dolomites, 75-943; Cu-Co-Fe sulphide mineralization, 75-975

ZAMBIA, *Copperbelt*, copper deposits, stratigraphy, genesis, 75-908; *Kitwe*, Late Precambrian copper deposit, 75-908; *Miku deposit*, new emerald locality, 75-1081

Zeolites, isomorphous replacement by ion exchange, 75-3142 (I.1); formation by hydrothermal alteration, 75-301; by transformation of halloysite, 75-3308; in alteration of basaltic, phonolitic, and rhyolitic glass, 75-2181; gas adsorption and ion exchange capacities, 75-1650; synthetic Li-zeolite, structure, 75-877; *Sardinia*, 75-1344; *Germany*, from melilite-nepheline, 75-3529; *Japan*, cation adsorption characteristics, 75-29; in pyroclastic rocks, zoning, 75-502; zeolite rock, 75-649; metamorphic facies, 75-650; *Arizona*, in tuffaceous rocks, 75-2460; *N. Carolina*, hydrothermal assemblages at diorite-granite contact, 75-652

—, analcite, formation by hydrothermal alteration, 75-301; synthesis, Si/Al ordering, 75-3142 (V.7); *Austria*, 75-1682; *Japan*, anal., 75-502; *North America*, 75-1642; *Colorado*, in oil shale and tuff, 75-501

—, barrerite, new zeolite, sodian stellerite, 75-3591

—, chabazite, formation by hydrothermal alteration, 75-301

—, dachiardite, *Italy*, Na-rich, 75-2462

—, epistilbite, crystal chem., 75-1343

—, erionite, *Ireland*, first British occurrences, 75-2537

—, faujasite, formed from halloysite, 75-3308; substitutional series, 75-504

—, ferrierite, first find in *USSR*, opt., X-ray, 75-506

—, garronite, domain structure, 75-876; *USSR*, anal., opt., X-ray, 75-1341

—, harmotome, *Germany*, structure refinement, 75-1913

—, heulandite, *Angola*, anal., opt., X-ray, DTA, 75-2461; *Alberta*, barian-strontian, 75-3528

—, laumontite, *Czechoslovakia*, gabbro-peridotite massif, 75-878; *Japan*, 75-651; anal., 75-502; in tuffs, chem., 75-503; *Réunion I.*, anal., opt., X-ray, 75-1342; *N. Carolina*, at diorite-granite contact, 75-652; *Alberta*, in non-marine sandstones, 75-3528

—, levyne, *Oregon*, intergrowth with offretite, 75-507

—, mordenite, crystal chem., 75-3527; water vapour adsorption, 75-3307; heat treatment effects on exchangeable cations, 75-302; *Japan*, anal., 75-502; in zeolite rock, 75-649; stability in zeolite facies metamorphism, 75-650; *Mexico*, silica minerals on fibres, 75-3523

—, natrolite, synthesis, Al/Si ordering, 75-3142 (V.7); trimethylsilyl derivatives, 75-1074

—, offretite, structure related to wenkite, 75-160; *Oregon*, intergrowth with levyne, 75-507

—, penkvilskite, *Russian SFSR*, new mineral, 75-1394

—, phillipsite, formation by hydrothermal alteration, 75-301; marine, rare earths in, 75-1144; *Italy*, structure refinement, 75-1913; *Indian & Pacific Oceans*, authigenic, formation rates, 75-1568

—, stellerite, sodian, 75-3591; *Italy*, sodian, anal., 75-2463

—, stilbite, *Japan*, 75-651

Zeolite facies rocks, *Hungary*, 75-2698; *France*, in *Aiguilles-Rouges massif*, 75-1615; *Cyprus*, 75-1521

Zillertal Alps v. *Austria*

Zinc, detn. in iron ore by AAS, 75-1758; detn. of Ag in concentrates, 75-2882; fixation by clay minerals, 75-2944; sorption by algal matter, 75-1203; in manganese nodules, 75-2229; in chloride solutions with granitoid minerals, 75-2085; in meteorites, 75-1260; *SW England* in granites, 75-3353; *Belgium*, accumulation in soils, 75-3419; *Germany*, in Trochitenkalk; *Black Sea*, in Holocene sediments, 75-364; *SW Africa*, wind-borne, effect on geochem. prospecting, 75-2336; *Arizona*, in mafic minerals, 75-2423; *Virginia*, geochem. reconnaissance, 75-1231; *Canada*, geochem., 75-2323

— deposits, *Wales*, Pb-Zn veins, 75-932; *Poland*, Pb-Zn mineralization, 75-940; chalcophanite from, 75-2480; *USSR*, 75-213; *India*, containing diagenetic pyrite, 75-2028; *Australia*, S isotope ratios, 75-1143; *New Jersey*, origin, etc., 75-2042; *Virginia*, abandoned mines, 75-958; *NW Territories*, Pb-Zn deposit, trace-metal dispersion, 75-414; *Guatemala*, Pb-Zn mineralization, 75-3095

— minerals and compounds, structural chem., 75-180, 184; ZnS polytypes, 75-1878; 1879; Kikuchi lines, 75-2995; topotactic ZnMn₃O₇, transformation from chalcophanite, 75-143; synthesis of zinc silicates, 75-2133

Zinckenite, synthesis, 75-3210

Zinnwaldite v. mica

Zircon, hydrothermal synthesis, 75-2134; morphology, 75-3494; thermoluminescence, 75-2732, 2901, 3142 (IV.7); origin of rock, 75-3454; metamict, origin, 75-1098; corrosion studies, 75-1009; *Northumberland*, in beach sands, 75-931; *Ireland*, from *Leinster* aplites and pegmatite muscovites, 75-441; *French-Italian border*, in igneous and metamorphic rocks, 75-1287; *Swiss Alps*, age detn., 75-728; *Norway*, dating, 75-561; *Russian SFSR*, in granitoids, 75-2398; with khibinskite, 75-556; varieties in metasedimentary rocks, 75-438; in Late Hercynian granites, 75-439; degree of metamictization, 75-440; *Baltic Sea*, placer deposits, 75-204; *Israel*, surface texture by SEM, 75-2663; *Mozambique*, zircon-hafnon series, anal., X-ray, 75-2521; *India*, in Precambrian quartzite, 75-2664; *Colorado*, 75-2765; *Florida*, micro-textures with SEM, 75-2671; *Georgia*, in sediments, 75-2672; *Kansas*, 75-1591; *British Columbia*, Pb/U dating of crystalline complex, 75-2840; *Greenland*, U/Pb ages, 75-1720, 2834

Zirconia, polymorphs, IR and Raman spectra, 75-3022

Zirconium, detn. by neutron activation anal., 75-2900; XRF detn. in ilmenite, 75-1783; in granites, 75-45; in phyllosilicates, 75-473; *Black Sea*, in Recent sediments, 75-628

— compounds, ZrO₂ crystallization and phase transformations, 75-2104, 3196, 3206; ZrV₂O₇ transitions, 75-3205; synthesis of silicates, 75-1052; structural characteristics, 75-1888

- inalite, *Russian SFSR*, new mineral,
anal., opt., X-ray, 75-2532
ite, IR spectrum, 75-1892; *New South*
Wales, in ophiolites, anal., 75-3463;
- France*, in metamorphic rocks, 75-1605;
USA, Georgia, in sediments, 75-2672
—, tanzanite, *Tanzania*, fission track
dating, 75-5
- Zululand v. South Africa*
Zunyite, atomic substitution, 75-3142
(IV.6)
Zwieselite, in zoned pegmatite, 75-1679



Mineralogical Abstracts

The Mineralogical Society of Great Britain and the Mineralogical Society of America are the joint publishers. The periodical can be obtained directly from the Publications Manager, Mineralogical Society, 41 Queen's Gate, London, SW7 5HR, or through any bookseller.

Annual Subscription for one calendar year of four issues and the index number, post free: U.S. \$50 or £20·00.

Back Numbers: volumes 1–13 of *Mineralogical Abstracts* were issued only with the *Mineralogical Magazine* (volumes 19–31) and are not available separately. With the exception of a few which are out of print, back numbers of the *Magazine* containing *Abstracts* are available at U.S. \$4·60 or £1·75 per number. Volume 14 onwards of *Mineralogical Abstracts* are available separately at U.S. \$4·60 or £1·84 per number.

Members and Fellows of the Mineralogical Society of America and Members of the Mineralogical Society of Great Britain may purchase the four numbers for any year from 1959 onwards for their personal use at U.S. \$10·00 or £3·75, post free. This special rate does not apply to single numbers.